Evaluation of a health intervention at Bwaila hospital in Malawi

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Abstract

Many countries rich and poor alike, among them Norway, have committed themselves to work to reach the Millennium Development Goals (MDG's) 4 and 5, which focus on children's health and maternal mortality. An initiative developed between Bwaila hospital in Malawi and the three Norwegian teaching hospitals Haukeland University Hospital, Oslo University Hospital (Ullevål) and University Hospital Northern Norway aims at improving the quality of care at Bwaila hospital by sending personnel and equipment. The overall goal is to contribute to reducing the maternal mortality in Malawi, by improving pregnant women's access to basic and comprehensive maternal health care. The objectives of this thesis are to look at how Malawian and Norwegian health personnel perceive this health intervention and how it affects their daily work in the maternity ward. This has been done by a qualitative study with interviews of a number of health personnel who have been actively working in the maternity unit during the intervention period. The study finds that there is an exchange of knowledge and skills going both ways. Several of the Malawian health workers expressed that this intervention is an important support in tough times. This study also reveals that different incentives for working are important for the understanding of the individual health workers situation and motivation. Both monetary and non-monetary incentives like career development, equipment and personal development are incentives important for job performance. Motivation is a topic that emerges, and it is being emphasized in this study that incentives for the different groups of health personnel should be taken into consideration when trying to understand the internal dynamics of a human resource intervention programme like this.

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Background

Malawi

This study was carried out in a hospital in Lilongwe; the capital of Malawi. Malawi is a relatively small, land-locked country in Sub Saharan Africa. It is bordered to the north and north east by Tanzania; to the east, south and southwest by Mozambique, and to the west by Zambia. Malawi is divided into three regions- Northern, Central and Southern, as well as 27 districts. The district of Lilongwe is in Malawi's central region. Lilongwe became the capital of Malawi in 1975 and until 1980 surrounding rural areas and villages were incorporated into the city(1). Malawi has a culturally and linguistically diverse population. Archaeologist and historians suggest that Malawi was occupied by ancestors of its present day inhabitants in waves of migration between the 13th and the 19th centuries. Malawians are predominantly Christian (80%) and Muslim (13%)(2). The British colonized the country. It officially became the British Central African Protectorate on May, 14, 1891.This, however, was preceded by exploration followed by the Portuguese, Arab, German and British interest in the area from 1616(3). Malawi plays a peripheral role both politically and economically, despite gaining independence in 1964. Independence followed a long transition period of political protest and civil disturbances, but was primarily peaceful. Until 1994, Malawi was ruled by dictator Dr. Hastings Kamuzu Banda, the" president for life." From independence, Malawi's policies were market oriented and emphasized development of economic infrastructure and growth rather than strong social goals and policies. While some development was funded through bilateral donations, other projects like the presidential palace in Lilongwe and the Kamuzu Academy, an elite educational institution, were funded by loans from private banks overseas(3).

(2)

Poverty and social indices

Malawi is one of the poorest countries in the world reflected in health, social and economic indicators. The population size of Malawi in 2006 was 13, 571,000 inhabitants (4). The Human Development Report 2004 ranks Malawi with a Human Development Index (HDI) as number 164 out of 177 countries. This very low ranking is the result of a low life expectancy of 46,3 years at birth, an adult literacy rate of

61,8% and a Gross Domestic Product (GDP) per person of only 690 US Dollars(4). As a comparison the Gross National Income per capita in Norway is 50,070 US Dollars(5). The Ministry of Health, Republic of Malawi stated in 2005 that: "the government with the support from various development partners… has implemented safe motherhood programs in various districts in the country. Despite all these efforts the maternal mortality has continued to rise"(6). They conclude that strengthening of the quality of the maternal health and new-born health care is necessary in order to reduce the high maternal and infant mortality in Malawi.

Norwegian Development Aid

Norway has been engaged in development cooperation with Malawi since the 1950s. The strategy and the focus of the aid is based on values such as solidarity and compassion, and a fundamental belief in the right of people to a dignified life(7). Women's rights and gender equality are among the most important priorities of the Norwegian Government's international development policy as set out in its policy platform. There is a consensus that the MDG's will not be achieved if women are not put centre stage(8). Norway has put a special emphasis on MDG 4 and 5, and the Norwegian Prime Minister Jens Stoltenberg himself is showing his concern and interest in these global challenges. In a speech at a Global Campaign press conference in 2008 he said:

> "We set a goal of reducing maternal mortality by three quarters by 2015. While we see progress towards most other Millennium Goals, in this area we hardly see any change at all"(9).

He continued to emphasize that helping women to have a safe delivery is a priority for the Norwegian government:

> "And we know what to do. Delivering in safety is the single most important factor in saving the lives of mothers and newborns"(9).

Increasing the number of women delivering in hospitals instead of at home is a priority for the Norwegian maternal health related development aid, as well as to contribute to improve the quality of hospital care. The approach is different from country to country. In India, Norway has a project, Norway India Partnership Initiative (NIPI) focusing among other things on improvement of quality of health services for

children(10). This human resource project at Bwaila hospital in Malawi is focusing on the quality of care at a maternal health care facility. Norway is also engaged in other health related development programs in Malawi, such as the Malawi College of Medicine and education of Malawian nurses. Of the total 368 Million Norwegian Kroner (NOK) spent on development aid in Malawi in 2008, 120 Million NOK (33%) was allocated to health, education and the social sector(11).

Malawi has a chronic shortage of health personnel and maternal mortality rates are among the highest in the world. The health intervention in this study has gap filling as its main aim. By supplying additional staff to the health care of delivering women one hoped to reduce the burden of the service with such a desperate shortage of gynaecologists and midwives.

In 2007 a partnership was developed between the Obstetrics and Gynaecology department in the cooperating hospitals in the two countries. Primarily it was initiated as personal initiatives from Oslo University Hospital and Bwaila hospital. By changing the Norwegian health personnel every 6th month the idea was that this cooperation should continue for a long time as a sustainable support(12).The problems to be addressed by the cooperation and the interventions selected were initially identified by staff presently working, or with previous experience, at Bwaila hospital. They were not only familiar with the needs of the hospital, but also had a vision for the future and a commitment to work for the development and improvements of the provision of services at the maternity ward. The Norwegian hospitals intended to help to improve the quality of obstetric care at Bwaila by this mutual collaboration. Bwaila hospital and Kamuzu Central Hospital are under the same administrative leadership, but are located in two different places in Lilongwe, 3 kilometres apart. In 2004, 11,760 deliveries were conducted at Bwaila hospital, and they had 58 maternal deaths, more than one every week(13). The Director of the Kamuzu Central Hospital and the head of the Obstetrics/ Gynaecology Department participated in exchange visits to two of the participating Hospitals in Norway to discuss and identify areas of collaboration. These needs were then presented to the relevant authorities in Norway and Malawi, to obtain back up and support for the intervention. The funding for the human resource intervention has been by the Royal Norwegian embassy in Lilongwe. The personnel have been replaced every 6th month and the project has continued uninterrupted until now.

Objectives of the health intervention

The hospitals have agreed on a proposal were the *overall* objectives of the whole health intervention are described. They are as following:

1) Improve pregnant women's access to basic and comprehensive essential/ emergency Maternal and Child health service,

and to:

2) Contribute to reduced maternal mortality in Malawi(12)

Some of the immediate objectives in the period 2008-2010 were:

1) To increase the safety of delivery at Bwaila by instituting basic obstetric care to delivering women at the hospital.

2) To support training of health workers and birth attendants in Bwaila hospital in maternal health and safe motherhood.

3) To examine the possibilities for increasing the health personnel's training, cooperation, information and ICT/e- learning (12)

Rationale for the study

The justification of this study is that interventions like this have to be evaluated from a variety of perspectives. Knowledge on how these additional human resources are perceived by the health personnel involved is important, as they are exposed to the intervention on a daily basis. Bringing health workers from abroad is one of many solutions for the human resource challenges that the Ministry of Health is facing in Malawi. It is one way to meet the problem of understaffed wards as a short term solution. This human resource intervention is supposed to contribute to:

1. Increased capacity in the labour ward

2. Improve delivery resources

3. Improve the quality of medical care in the labour ward

4. Add a number of specialist personnel
5. Strive towards harmony and teamwork between the Malawian and Norwegian health workers.

This process evaluation study seeks to increase knowledge on how expatriate health competence is experienced in daily work by the health personnel involved. It will give the health personnel involved a possibility to express their opinions and reflections on this human resource intervention. It is of major importance to evaluate the process of achieving these goals. The rationale behind it is that interventions should be evaluated to see if they have the intended impact. If they do, they may be an example to follow in other settings. If they do not have the wanted impact, process evaluations may contribute to understanding why they fail. Process evaluations are also useful in permitting people not intimately involved in a program- such as external funders and public officials- to understand how a program works practically(14). By describing and understanding the details and dynamics of the program, it will help in isolating elements that have contributed to successes or failures. Such knowledge can enable external persons to make more wise decisions about similar programs in the future.

Limitations of the study

It is of utmost importance to state the limitations of this study: it does not claim to do an overall evaluation of the intervention, and can in that way not be used alone to evaluate this project. Other perspectives and evaluations have to be included to get a full understanding of the impact and success of the evaluation. The whole health intervention is part of an institutional cooperation between three Norwegian hospitals and Bwaila hospital in Lilongwe. This health intervention includes sending health personnel to Bwaila hospital, as well as equipment and development of telemedicine. This master thesis is a process evaluation of the intervention brought about by supplying human resources in the maternity unit; no other part of the maternal health intervention has been evaluated. This is a small study within a bigger programme, and does not claim to evaluate the health intervention as a whole. It does not claim validity outside of this specific project, though it might be relevant for similar health interventions in other settings.

Objectives of the study

This study aims to describe the experiences of Malawian and Norwegian health workers in relation to the human resource intervention. It aims to see how the addition of two health providers from Norway at the labour ward Bwaila hospital is regarded by the health personnel involved. The objectives are the following:

1) To explore the views of the Malawian health workers as to what impact the intervention has on their practice in the labour ward and on patient care

2) To explore the views of the Norwegian health workers as to whether the intervention has enabled them to work effectively at Bwaila hospital

3) To understand the views of the involved parties on the intervention's impact on health care delivery, patient care and the labour ward health workers' capacity to provide care

4) To record the views of both the Malawian and the Norwegian health workers as to how to improve the intervention.

Literature review

Research studies in Malawi

This study is within the category of health system research which is a practical type of research. There is limited research that addresses interventions trying to improve health service delivery in Malawi. Nothing much has been done, and what has been done is mainly on health personnel's Human Immune Deficiency Virus (HIV) prevention and retention factors among mid-level providers, not on human resource interventions. The study "Impact of a Peer-Group Intervention on Occupation-Related behaviours for Urban Hospitals Workers in Malawi (15) was done to evaluate the HIV prevention intervention on urban hospital workers. The knowledge on Universal Precautions and the practice held by health workers was assessed before and after a health intervention. Malawi has many health care problems, and this HIV prevention study was done to assess the impact of a health education on

health workers. It showed that the intervention had a positive effect on the Universal Precaution practises of the health workers. Whether this changing in Universal Precaution practice had a long term effect was not evaluated in the study.

There are also a few studies looking at retention factors and work environment for Malawian health workers. The result of one of these studies," Mid-level providers in emergency obstetric and newborn health care, factors affecting their performance and retention within the Malawian health system"(16), showed that although insufficient financial remuneration had a negative impact on retention and performances, the main factors identified were limited opportunities for career development and inadequate or non existing human resource management systems. The lack of performance related rewards and recognition were perceived to be particularly demotivating. The status with other health care providers was also a topic, and tensions regarding differences in salaries, benefits and workload between clinical officers and doctors were a thematic area in the study. Even though this study was limited to Malawian health personnel, it is relevant for this study, as salaries, working conditions and incentives are very different for the Norwegian and the Malawian health workers at Bwaila hospital. Another study looking at the work environment of mid-level providers shows that mid-level medical staff members are significantly less satisfied than mid-level nurses regarding their work environment, particularly their workplace relationship. The study concludes that the poor motivational environments in which clinical officers work are of concern regarding their job motivation and retention(17). This is relevant background knowledge for this study, as the relationship between the Malawian and the Norwegian health workers during working hours is a topic in the interviews in this study. A third study looking at retention of health workers in Malawi showed that factors like justice and equity, sense of self worth, being appreciated and respected by colleagues and managers, positive working relationship and adequate rewards were important retention factors(18). The staff did not like inequities in how the staff was treated.

However, no studies were found to evaluate the impact of having expatriate health personnel coming to work along with the Malawian health workers for limited periods of time.

Maternal mortality

Maternal deaths occur as a result of direct or indirect causes related to pregnancy, childbirth and the postpartum period. Of the estimated 324 900 maternal deaths worldwide in 2008, the majority occur in the developing countries(19). The fifth MDG is to reduce maternal mortality by 75% between 1990 and 2015. Even though the maternal mortality ratio (the number of maternal deaths per 100 000 live births) in Malawi has declined from 1662/100 000 in 2000 to 1140/ 100 000 in 2008 according to the Lancet, May 2010 (19), it is still one of the highest in the world. Only the Central African Republic and Afghanistan show a higher maternal mortality ratio than Malawi in this Lancet rating. It is commonly known that achieving the MDG's on maternal health by 2015 will be difficult. 80% of the maternal deaths are due to direct causes and the remaining 20 percent are due to indirect causes. The four major direct causes of maternal death are severe bleeding mainly due to postpartum haemorrhage, infections and hypertensive disorders of pregnancy, eclampsia and obstructed labour. Complications after unsafe abortion cause 13 percent of maternal deaths. Indirect causes that complicate or are aggravated by pregnancy include malaria, anaemia, HIV/AIDS and cardiovascular diseases (WHO 2005).

The three- delay model by Thaddus and Maine (1994), described the delays resulting in maternal deaths like this: 1) seeking care, 2) reaching care and 3) providing care are the main factors that lead to maternal deaths(20). The first two delays are related to the patient's care seeking practices, where decision-making and transportation are main factors. The third delay occurs at the health facility, and is due to factors including the shortage of personnel, drugs and equipment, administrative delays and clinical mismanagement of patients(21). This third delay is the part of maternal death prevention at Bwaila hospital that this human resource intervention intends to focus on. Though one does believe that perceived capacity and quality of services is one of the pull factors also for the two first delays. A study done in 2009, where Bwaila hospital was also included in the data collection, showed that patients sometimes postponed seeking hospital facility care because of the poor treatment they got there(22). A comparative analysis of maternal health services in four countries showed that skilled attendance for delivery relies heavily on how a system functions, particularly, the availability and quality of staff to handle emergencies. The authors conclude that it is unclear how effective simply increasing

the percentage of deliveries with skilled attendance will be if systemic issues are not taken into account(21). It might be easy to point fingers at providers for a wide range of problems, but it is more important to understand the challenges they face, the system in which they work, the incentives and disincentives they are given to achieve certain objectives, and the opposing pressure they face in delivering services(22). Since quality is determined by a set of complex factors at different levels of the health system, methodologies that put the blame on individuals or a group of professionals may not identify the root causes of poor quality of care.

To be able to know if one is going in the right direction of achieving the MDG's, evaluations of health interventions is an important step on the way to gaining that knowledge. In order to measure maternal mortality large samples are required, and this is very expensive. Changes over a long period of time are needed to ensure that changes observed are statistically significant. These constraints explain why maternal mortality measurements are not practical tools for program monitoring. Thus, it is important also to focus on a variety of process indicators.

Human resource crisis

Human resources have been described as "the heart of the health system in any country"(23). The growing gap between the supply of health care professionals and the demand for their services is recognized as a key issue for health and development worldwide. The World Health Organization (WHO) reports a global shortage of 4.3 million health workers, including approximately 3 million health professionals. Most of the migration of health care workers worldwide is from low-resource to high- resource nations, as incentives to work in richer countries are in general higher and in that way more attractive to most health personnel(24).

The availability of health professionals is critical in assuring high quality emergency obstetric services. One can say that the MDG for maternal health is unlikely to be achieved without attention to the recruitment and retention of health professionals. One of the big problems with health personnel in Malawi is that they are emigrating in high numbers, especially to the United Kingdom. That is what is called "brain-drain" of the poor countries. There are both push and pull factors that motivate them;

better working conditions and higher salary than in Malawi is well known to contribute to this emigration. But also poor salary, few incentives and substandard quality at the health facilities in Malawi are push factors that contribute to more health personnel leaving the country. Nurses and midwives are emigrating in especially high numbers. Besides the factor of emigration, HIV/AIDS is also an important factor for the reduced number of health personnel in Malawi. Some estimate that 25% of the Malawian health workers will die from HIV/AIDS during the next decade(25). Both these factors become a big problem for the remaining staff as they have to face work over-load and understaffing at their work place. Team work is an essential component of high quality maternal health care, and loss of team members can also reduce job satisfaction and lower morale. The increased workload, levels of stress, fatigue and emotional exhaustion can increase, all of which compromise the quality of maternity care(26). Many countries worldwide are affected by the shortage of health personnel, fifty- seven of them being identified as in “crisis”. Human resources are increasingly becoming a high priority on the political agenda. The idea and practice of task shifting, implying that medical tasks are being performed by a health worker with less education is one way to solve the human resource crisis in many developing countries(27). The Clinical Officer is an example of this; they have a 3 years medical education following high school, and are trained to perform caesarian sections at the hospital. This is traditionally a medical doctor’s responsibility. There is a consensus that despite the importance, human resources have been a neglected component of health system development in low income countries(23). There is a constant and critical lack of doctors, midwives and nursing staff in Malawi. An April 2004 report from the Ministry of Health describes that the human resource situation in the health sector has been described as “critical, dangerously close to collapse, meltdown”, and that the health sector is “facing a major, persistent and deepening crisis with respect to human resources”(6). Malawi has only 1.1 doctors and 25.5 nurses per 100.000 people for the country as a whole. This compares unfavourably even to other countries in the region, as we can see from the following table:

Table 1. Medical staff per 100,000 population, 2004[18]

Cadre	South Africa	Botswana	Ghana	Zambia	Tanzania	Malawi
Physicians	69.2	28.7	9.0	6.9	2.3	1.1
Nurses	388.0	241.0	64.0	113	36.6	25.5

(6)

According to some studies there are nurse/patient ratios in Malawi that is down to 1:50 for maternity and 1:51 for gynaecological patients(26), which of course is far too low for safe patient care. This is the ratio for patients actually coming to the hospital. The doctor/patient ratio in Malawi is much lower. The National Organization of Nurses and Midwives in Malawi made in 2006 a proposed strategy for incentives and a motivational package for nurses and midwives in Malawi(28), and presented it to the Ministry of Health. They suggest that to address the challenges of maintaining and retaining a dynamic health care team the midwife/patient ratio should not be more than 1-6, meaning a midwife should be able to care for 6 women in the labor ward at the same time. One midwife must often simultaneously be in charge of 10 delivering women at Bwaila hospital. As a comparison the patient/midwife ratio in Norway is supposed to be 1:1 for women in active labor. The midwife/patient ratio is a non-monetary incentive, as the quality of health care, will be dependant on this ratio.

Incentives and Motivation

The WHO defines incentives as “all the rewards and punishment that providers face as a consequence of the organizations in which they work the institution under which they operate and the specific interventions they provide”(29). Motivation and incentives are linked together; different kinds of incentives will influence the motivation of the health worker in one direction or the other. Motivation can be defined as “the willingness to exert and maintain an effort towards organizational goals”(30). Simply defined, positive incentives are the factors and conditions within a health professional’s work environment that enables and encourages them to stay in their jobs, in their profession and in their countries. Incentives can be positive or negative, monetary or non-monetary, tangible or non-tangible. How health workers will respond to different reimbursement structures, monitoring strategies, and

management contexts is largely unknown (23). In Zambia the government together with the Dutch government decided to find out where the doctors who had left the country were and went to talk to them about their working conditions. Many of them were in neighbouring countries like Botswana, where the salary related conditions were better. They were asked what would enable them to go back and work in the rural districts in Zambia. The answers were not that complex; slightly better housing, schools for the children, some transport and communication. This was provided for the doctors in Zambia. The price of that program was about 3000 Euro per person pr year, and as a result between 200 and 300 Zambian doctors did return to work in Zambia(25). This shows that positive incentives are an important factor to make health workers continue to work in their home settings, and is relevant for understanding the motivation of the Malawian health workers as well.

Quality of care and maternal health services

Quality of care is challenging to measure as there is no universal agreement of what quality is. Quality relates to the effectiveness of the task that has been performed. Quality of basic and comprehensive emergency obstetric care has been quantified by the United Nations (UN) process indicators. The process indicators measure aspects of the health system using emergency obstetric services as a “tracer”. Two of the indicators measure the availability of emergency obstetric care, three of them measure utilization of these services and one addresses the quality of care provided(31).

These indicators are applied to facilities to assess adequacy and quality of maternal health services(32). The problem is that these indicators mainly focus on increasing the coverage without taking into account specific characteristics of health services. The quality of human resources in maternal health is a developing area of scientific inquiry. Staff shortages are considered a major obstacle to the provision of good quality care(33).

By “quality of care” we can think of different outcome measures for assessment. A straightforward and simple criterion of quality is the number of case-survivors(34). But quality cannot be defined only in a clinical and technical sense. One of the main objectives of the health intervention at Bwaila is to contribute to the reduction of maternal mortality at the hospital. Measuring a reduction in maternal mortality at

Bwaila hospital would be one way of showing an improved quality of care at the hospital. It is however a challenge to quantify the reduced mortality in any country. It is also a fact that health interventions focusing on processes will not immediately be identified as contributing to a reduction in the maternal mortality ratio. It has been suggested that the process of care in terms of clinical and interpersonal aspects of care could be monitored(35). The clinical aspect of care would be the quality of the exact procedure performed. Interpersonal care describes the interaction between the health care professionals and the users they interact with. A number of factors underlie good inter-personal skills, including: communication, the ability to build a relationship of trust, understanding and empathy with the patient, and to show humanism, sensitivity and responsiveness(35).The relationship between a patient and a provider should be characterized by privacy, confidentiality, informed choice, concern, empathy, honesty, tact and sensitivity(34). This is the “gold standard” of how patients should be treated. Research shows that quality of care is impossible to achieve if in the provision of care, the quality of life of the caregiver is not provided for .This demands the recognition of the care giver as a person in the same way that one recognizes the patient as a person. Barbara Kwast emphasizes that any discussion about improving quality in maternity care must take both client satisfaction and provider fulfilment into consideration(36). Improvement of patient management could be an indicator of improvement of quality of care at Bwaila hospital.

The processes of producing good quality services are not well documented even though they are fundamental to service effectiveness. One predominant gap in the evidence is evaluations of human resource interventions to address shortages and misdistribution, and interventions to maintain accessibility and quality of maternal health in this context(26). In light of the interest in reducing maternal mortality and morbidity, assessment of interventions to improve the quality of Essential Obstetric Care become more important. Both researchers, program managers, midwives and doctors would benefit from a judicious use of quality assessments(37).

There are many different approaches to investigate and assess quality of care within maternal health services. Since quality tends to be a product of the interaction of several elements within the health system, evaluation necessitates several different approaches. This study will analyse and evaluate how the health personnel involved

perceive the human resource health intervention and how they regard different aspects of quality.

Evaluation theory

To do an evaluation involves having one or several criteria by which the merit or worth of the evaluated intervention is assessed. The evaluation enterprise is characterised by plurality and diversity, as witnessed by the broad range of data-gathering devices which evaluators have at their disposal(38). Several different types of evaluation criteria have been developed. One of the most commonly used for development aid is the one developed by the Organisation for Cooperation and Development (OECD). It consists of five criteria:

1) Relevance: The extent to which a development conforms to the needs of target group and the policies of recipient countries and donors.

2) Sustainability: the continuation or longevity from a development intervention after the cessation of the development assistance.

3) Impact: Describes the totality of the effects of a development intervention, positive and negative, intended and unintended.

4) Efficiency: the extent to which a development can be justified by its results taking alternatives into account.

5) Effectiveness :says something about to what degree a development intervention has achieved its objective, taken their relative importance into account(39).

As in research in general, a particularly important distinction in evaluations is the one between quantitative and qualitative data. The major differences between these two approaches is that one deals in numbers and the other is concerned with meaning expressed in words(38).This study is a qualitative process- oriented evaluation of how the intervention is perceived by the health personnel involved. Qualitative data are collected to obtain details of the subjective experiences of programme planners

and participants in this process-oriented evaluation. Ultimately, the evaluation question should be the determining factor when making methods choices; “our message is pragmatic, research tools should be chosen for the particular job at hand”(38). As the perceptions of health personnel are my field of interest, a qualitative study was the method I chose.

My main focus in my analysis is the two criteria of *impact* and *relevance.* However, in the discussion chapter I will also look into the other criteria: *effectiveness, sustainability* and *efficiency.*

However, this is only a limited process evaluation, and has no intention of evaluating the total impact or overall relevance of the health intervention. That would require a much larger evaluation including collection of both quantitative and qualitative data.

METHODOLOGY

In this chapter I will discuss and explain the methodology of the study. First, I will present the research design and approach. Thereafter, methodological issues related to the study site, access and participants would be presented. The data collection methods will be presented with an emphasis on the process in the field and on strengths and limitations. In the next chapter reflexivity will be examined followed by the trustworthiness of the study. Then the ethical considerations and the process of getting ethical clarification in Norway as well in Malawi will be presented.

Research design

This study is a qualitative, process evaluation study of the human resource intervention at Bwaila hospital. The techniques used to collect data were semi structured interviews, observations and a discussion group. The chosen data collection methods were applied on three different samples, Malawian health workers, Norwegian health workers and other expatriate health personnel working at Bwaila hospital.

The aim of the study is to better understand how this health intervention is experienced by the health workers involved during their daily work. The questions were of an exploratory nature, seeking answers to questions like how, why and what. The focus of the study is to find out how the health workers experience and look at this intervention, as well as their reflections on their working situation. Trying to quantify any output by this intervention for example by counting c-sections, vacuum extractions or deliveries was decided not to be the best way to evaluate this project. Or to put it in another way, the quantifiable aspects were not what I wanted to look into in this health intervention. The main focus of the study was to get information on how this health intervention is perceived by the different health personnel involved. In this specific process evaluation it will be a here and now study to get information about the health personnel's perception of the health intervention. Qualitative inquiry is highly appropriate for studying processes because 1) depicting processes requires detailed descriptions of how people engage with each other, 2) the experience of processes typically varies from one person to another so that their experience needs to be captured in their own words, 3) processes are fluid and

dynamic so it can't be fairly summarized on a single rating scale at one point in time, and 4) participants perceptions are a key process consideration(14).

This process evaluation aims at elucidating and understanding the internal dynamic of how the human resources health intervention at Bwaila hospital operates. "Health care evaluation is the critical assessment on as scientific rigorous basis as possible of the degree to which health services fulfil stated objectives" (40). This is a process evaluation where meanings, thoughts and reflections from the participants will form the main conclusion of the evaluation. The findings of the study will be seen in relation to commonly used evaluation theory. For this study, individual interviews offer the opportunity for the participants to further explore issues coming up in the study. Both probing, clarification and further explanations are possible within this type of data collection. This method of data collection suits my study. Instead of using a structured guide that will limit individual expressions and further probing this form of interview does not restrict participant expression. A focus on processes involves looking at how something happens rather than examining outputs and outcomes. Process evaluations try to understand the internal dynamics of how a program, organization or relationship operates. Data from the process evaluation might give knowledge about the extent to which the program is operating the way it is supposed to be operating. It can reveal areas in which the program can be improved as well as highlighting strengths of the program that should be encouraged. If the program, in practice, deviates from initial plans and explanations, the process evaluation can help to say something about how and why this happens(14).

The study site, access and sampling.

The study site

The site for this study was Bwaila Hospital in Lilongwe, Malawi. Bwaila hospital is a referral maternal Government Hospital. It provides secondary level obstetric services for 9 districts with a population of over 2.1 million. It is a referral hospital that provides tertiary level services for 9 districts in the central region of Malawi and a teaching hospital for Clinical Officers, Nurse Midwives and Doctors in Malawi. The hospital attends to approximately 12. 000 deliveries per year; this includes care to

low risk and high-risk patients. The care includes both basic and specialist obstetric care.

The sample size

Two main sample groups were selected for this study, Norwegian health personnel and Malawian health personnel. From the Malawian side I initially planned to interview 2 clinical officers, 2 midwives, 2 doctors and 2 matrons. From the Norwegian side I planned to interview everyone that was or had been working in Malawi. In practice I ended up interviewing the following Malawians: 2 clinical officers, 3 midwives, 2 doctors and 2 matrons. One expatriate doctor and one expatriate midwife, working at Bwaila, but not employed by the project, were also included in the study. Of the Norwegian participants, 6 were interviewed in this study, not all of them directly involved in the project, but all having worked at Bwaila hospital in the maternity ward during the intervention.

Inclusion criteria:

The inclusion criteria for the Malawian health personnel were initially that they had been working at Bwaila hospital since the start of this health intervention, namely November 2007. In practice it showed to be difficult, as there is a high turn over of personnel at the hospital, so the inclusion criteria were changed to be that they had worked at the hospital for at least one year. This inclusion criterion was sufficient to get enough participants in the study. The secretary at Bwaila assisted me in making a list of people who fulfilled the criteria. From that lists the people who were available in the period the interviews were done was interviewed. Inclusion criteria for the Norwegian health personnel were that they worked or had worked at Bwaila hospital as part of the initiative. Also, the Norwegian health personnel that had returned to Norway were asked to participate in the study. Other Norwegian personnel that worked or had worked at the hospital, but not directly employed by the initiative were also interviewed. The reason for this was partly because of the low rate of Norwegians willing to participate in the study, and partly as a way to triangulate the findings, with perspectives from other views than those directly involved in the intervention. What all of the participants in this study share is that they have a medical background and have been working in the maternity ward during the time that the intervention took place.

Sample selection:

Informants from the sample of health personnel were recruited by me, and were selected by the presumed knowledge they had about the intervention. This is what is usually called purposive sampling (14).

The Malawian health workers consisted of 9 informants who had been working at Bwaila hospital from 1 to 18 years. All of them were currently working in the maternity at Bwaila hospital. They were recruited by me, either I called them or met them face to face in the maternity ward. They were asked to participate either face to face or over the phone. They were given the informed consent form to read and reflect if they were willing to participate in the study. They called me back if they were willing to participate and a date was set to take the interview. I had a relatively little time to do the interview, 2-3 weeks only, due to delays in achieving full ethical approval. I chose to interview those that were available during these weeks. This sampling strategy is called convenience sampling, and means that the informants are selected by their availability for the research(14). This can be a useful strategy when the research population is hard to reach, or if they are in a situation where it can be difficult to have scheduled appointments. The informants sometimes came when they were on call in the hospital, leaving the phone on during the interview, in case of emergencies. Some also came before or after night shift. As all public transport stops when it gets dark, the interviews with the Malawians had to be done during day time, and I had to be flexible when making the appointment with the informants. In practice I spent the days in the Matron's office, and when the informants knew I was there the whole day, this would give them flexibility in choosing the time for the interview, and also reduce the degree of interruption in their work duties. One bias concerning the recruitment of the informants was that the ones who agreed to participate in the interview in general could be suspected of being more positive to the health intervention than others. The rationale behind this is that those more positive towards the intervention, and those that in some way benefit from the intervention would more easily accept to participate. None of the Malawian health workers I contacted declined to take part in the study. Out of the Norwegian health personnel several declined to participate, either with an active refusal or by not responding to e-mails.

DATA COLLECTION METHODS

The qualitative interview

Qualitative interviews are in very general terms referred to as “structured” and “unstructured”. The first refers to a more formal style were the researcher is bound to a fixed set of questions, and the respondents have to answer in predetermined answer boxes. The second refers to a conversation were a list of themes are to be explored during the conversation.”…In the world of evaluation, the inclination towards structured interviewing often runs parallel with a preference for measuring outcomes…The inclination towards the unstructured interview is more recognizable in researchers who prefer to understand process…(14). Both these approaches have been criticized. The structured interviews are accused of imposing preconceptions and frameworks on the respondent, and in that way make it easy for the respondent to misunderstand the researcher. The unstructured interview on the other hand is accused of being too subjective thus making it difficult to compare from one respondent to another. I have decided to go for a semi-structured interview guide. I had planned open ended questions, but was willing to change if during the investigation other questions appear to be more appropriate.

In my qualitative approach I focused on interviews with key players in the intervention, as well as health workers on the ground in the maternity ward.

Procedure for interviewing

The health personnel working at Bwaila hospital were interviewed preferably outside their working hours. They were interviewed one by one from the start. The length of the interviews was from 40 minutes to one and a half hours long. The interviews were conducted in a quiet place in the hospital area, where there were no interruptions. The Norwegian health personnel who had returned to Norway were interviewed when I returned to Norway. All the interviews were done by me, and this increased the consistency in the questions and the probing. It also made it possible to reveal new concepts and take them further with the other participants. All the interviews with the Malawian or expatriate health personnel were done in English,

and all the interviews with the Norwegian health personnel were done in Norwegian. The procedures for the interviews were the following:

1) I gave the informants a copy of the consent form at least one day before the interview so the informants could reflect and read about the study at home before accepting for the interview and signing the form

2) I set up the room for the interview with the tape recorder and placing of chairs

3) I gave information about the study orally

4) I discussed informed consent issues and gave them the informed consent form to sign.

5) I gave the interview.

When writing the protocol in Norway before leaving for Malawi I planned to have a quite loosely structured and even just a list of topics that I wanted to explore with the informants. But after feed back from the ethical research committee in Malawi it was decided to go for an interview guide with a list of questions that I would ask the informants. The interview guide consists mainly of open- ended questions that gave room for the informants to answer the questions in their own words. This interview guide makes it easy for people with interest in the evaluation to see what questions were asked during the interview.

The usage of audio tape recorder

I asked all the informants about the permission to use the tape recorder during the interview. It was explained , both in preparation before the interview, but also in the informed consent form the reason for why I wanted to tape the interview ,namely that then I did not have to sit and write during the interview, but could focus on the dialogue with the individual health worker. It was also emphasized that I would be the only one who would listen to the interviews on tape. Most of the informants accepted this and agreed that the conversation could be tape-recorded. One informant refused the tape recorder to be used just before the start of the interview, and I only took notes during this interview. As I understood it was the anxiety to be recognized having said something negative about development aid that was the reason for not wishing to be taped during the conversation.

This interview I have chosen not to use actively in my findings, but it is included in the list of total number of informants. The reason for this is that my notes from this interview were not good enough; a lot of information was presented and I had to try to follow the conversation more than writing notes. It is accepted that the use of a tape recorder can have a limiting effect on the informants and what they choose to say in the interview. I experienced some cases were additional information was given after the tape recorder was turned off. This was sensitive issue and I understood the informants did not want to be quoted on commenting on these issues. In addition to the use of the tape recorder I planned to take notes, in case the tape recorder should not function properly, or there should be too much background noise. Taking notes was also planned because I wanted to capture the tacit knowledge, like body language, facial expression or other non-verbal communication. In fact the degree of notes I took was not very great. I needed to use my focus and energy on the dialogue with the informant, and felt very quickly that if I started writing and not being actively involved in the conversation, I could not follow up with proper questions and probing. So my notes are mainly done after the interview was over and the informant has left. I did some small reflective notes regarding my subjective feelings about how the interview went. By listening to the tapes afterwards I feel one can hear from the tone of the voice and how it is lowered or more sharp something about the feelings underlying the topic of the conversation. I had not expected this when I started listening to the tapes, but it gave me an additional understanding of different emotions underlying the topic discussed.

The interview setting

Being aware of the context in which the interview was done was an important step in the planning phase of the project. It is essential to reflect upon how different interview settings can influence the interview situation, as this can bias the data collected. All the interviews in Malawi were done at the informant's workplace, most often on a scheduled day. The interviews took place in the matron's office, centrally located in the hospital area. Doing interviews at peoples' work place can prevent people from speaking open and freely, as some might find it inappropriate to talk about their work situation in this location, or have concerns about information shared on confidential issues. The setting and location can have a significant influence on the success of the interview. Interviewing a programme participant in, for example,

the matron's office may produce a different response than if the interview was conducted on neutral ground. I was well aware of this before starting my study and wanted to do the interviews in a more private setting, as for example in my hotel or in their private homes. However, due to constraints regarding time, the difficulty many had in getting around in Lilongwe and also the very limited time the health workers had between home and work I had to choose the hospital as my interview arena. Of the entire 17 interviews only one was done in a private home. This was in Norway, and was the longest interview of them all. The private setting made a different atmosphere for the interview; it became more relaxed and gave richer information regarding the thoughts and reflections of the informant. The interview was more informal, more personal and the focus on the fact that it was an interview situation came more in the background. It would have been interesting to have had this kind of interview setting in Malawi as well, to see how the interview situation would have developed in such a setting. Would the answers have been different from the ones given in the hospital? Unfortunately this was not an option in this study.

Language used in the interviews

English was the language used with the Malawian health personnel and expatriate personnel. Norwegian was used with the Norwegian health personnel. In Malawi English is an official language. Health workers in Malawi have their medical education in English, and speak it very well, so no interpreter was needed during the interviews. A few times, the English spoken could be a challenge for me to understand, especially if they spoke very fast. Fortunately, months spent in the field before starting the interviews made me adapt to the language. In the beginning of the project I considered using an interpreter and do the interviews in Chichewa: the official local language in Malawi. However, the high degree of education and English skills among the informants, as well as my wish to hear directly what the informants said about the intervention, made me discard this option. If patients had been included in the study, the case would have been different, and an interpreter would have been used. If there were any uncertainty whether the informant was correctly understood, the answer was repeated to make it clearer. Some words and formulations were unfamiliar to me and had to be repeated by the informant. This went both ways. Also my use of words in the questions I had made was not always

understood by the informants. My way to approach the negative aspects of the intervention as when I was saying; “what is the less beneficial sides of this intervention?” was not understood by several of the informants. I had to rephrase it to if there” were any aspect of the intervention that could have been better”. This can occur due to different use of language and words but maybe also due to cultural differences in how you approach talking about negative things. Malawians are known to be very polite and might not easily talk negatively about a topic presented to them. According to Asbjørn Eidhammer, former Norwegian ambassador in Malawi, there is a saying that only when you ask a Malawian a question for the third time they will tell you what she/he really means(1). When doing interviews in a language not native to the informant or the interviewer there is always a risk that misunderstanding may occur. Awareness was given to this, but in practice it was difficult to avoid completely. During the interviews there was, however, in my opinion no sense of a real language barrier.

Observation

The challenge of doing interviews as the only source of data collection is that you only get information of what people say, not what they actually do. There might be a difference between what people say they do and how they actually act. Observation is a good way of getting knowledge about the complexity of human interaction. In the world of evaluation, participant observation is a commonly used method for the evaluator to get a broader picture of the investigated area.

When writing the protocol in Norway I was planning to do participant observation as part of my data collection methods. The protocol was accepted by the Norwegian ethical committee, but not in Malawi. One of the areas of concerns for the Malawian ethical committee was that I could not both be part of the project and the same time evaluate it. Working as a midwife at Bwaila would make me a part of the ongoing Norwegian intervention according to them, and would make me biased towards a better understanding of how the intervention was experienced from only one side, namely the Norwegian. I was recommended to drop the participant observation and only focus on the interviews, which I then decided to do. But in order to see the hospital and get an idea of the working condition I did two weeks “orientation” at the

different wards in the maternity at Bwaila; prenatal ward, postnatal ward, nursery and labour ward. Orientation is a programme that all midwives that want to practice midwifery in Malawi have to go through to be accepted by the Nurses and Midwives council of Malawi.

A couple of days at each working place together with a member of the staff gave me an impression of what it was like to work at Bwaila in general. This was the same process that all the Norwegian health workers had to go through to be able to practice as doctors and midwives in Malawi. In the prenatal ward I experienced very young women, teenagers, coming for their first pregnancy consultation, being asked about their marital status and had their HIV status tested. In the postnatal ward I experienced a high number of post operative patients with high demand of nursing care and very few staff to take care of them. It was an opportunity for me to see the patients coming to the clinic, and how they responded to the system and the staff caring for them. I had some informal conversations with the staff that gave me an insight in their daily life and the challenges they were facing. The lack of staff was evident also in the nursery and in the labour ward. In the nursery 30 premature babies could be looked after by 3 nurses and midwives in a dayshift and even fewer in a nightshift. This was a very different working environment from what we have at home in terms of workload, equipment and patient cases.

Two weeks was just enough to get a small idea of what working here full time over an extended period would be like. Looking back now, I think the most valuable contribution for me doing the orientation was to have seen the patients that the health personnel treat every day at Bwaila hospital, as well as getting an idea of the system that the health workers work in. I was far from being familiar with the procedures and the systems during those two weeks. As this orientation was done several months before my study started, I was regarded by the Malawian health workers as a midwife coming to work here for a limited amount of time, like many others, also the Norwegian health workers. I had initially planned to do this so that I later could be able to do the participant observation in the maternity ward, but it ended up, however, being the only time when I actively worked in the maternity ward. Helping me to understand the actual challenges in the ward, it made me more capable of understanding the working situation seen from the health workers perspective. I believe this was reflected in the interview situation.

Group discussion

The discussion group was with 4 Malawian midwives who are presently studying in Norway. I originally intended to have a validation group with health workers I had interviewed at Bwaila. I did, however, have very little time to do the interviews before returning to Norway. Gathering a number of the health workers together was difficult due to their shift work and this made the validation group impossible during my stay in Malawi. Since that plan didn't work out, I decided to organize a group discussion with 3 Malawian PhD students and one Malawian master's student at the University of Oslo, Institute of Health and Society. They are all midwives who have either been students at Bwaila hospital or have worked there as midwives or matrons. The main findings of this study were presented to them and they were encouraged to comment and give their own reflections around the topic presented. This was done to get feedback from the health personnel to what degree they could relate to the findings and if not, then why. Their comments to the study will be integrated in the findings when appropriate.

Reflexivity

When doing a qualitative study, the investigated topic is seen through the lense of the researcher, and reflexivity has entered the qualitative lexicon as a way to emphasize the importance of self-awareness(14). To be able to reflect upon how the researcher's cultural, political, social, linguistic and ideological origins is therefore very important. The researcher can not put aside all aspects of him or herself, but should be open about them, as well as how one's person can affect other people or a social setting. In qualitative research the researcher is an active participant in the data collection. Personal skills and behaviour of the researcher will be an influencing factor for the outcome of the study. In qualitative interviews, as well as participatory observation, there should be sensitiveness towards the researcher's characteristics, listening skills, behaviour and ability to establish trust. Another aspect of reflexivity is the importance of acknowledging biases and limitations, and to honour multiple perspectives. It is not a goal in itself, nor is it possible, to completely remove all biases. By presenting the researcher's background and perspective, it will help the

reader to understand the starting point for the researcher, and this can be taken into consideration when reading the findings of the study(41).

Being a midwife was in my opinion an advantage that made it easier for me to interview the informants. I share the medical language with the people I interviewed and used terminology that did not need any further explanation. The commonly shared knowledge about working in a maternity ward was a way to get access to the thoughts and reflections of both the Malawian and the Norwegian health personnel. I do see, though, that me being a midwife is biasing my focusing on the midwifery aspect of this intervention. My background as a midwife having worked for Doctors without Borders in two different settings, namely Sierra Leone and Pakistan, was also important. I had myself experienced working as a Norwegian midwife in a totally new and different setting. This did make it easier for me to understand the Norwegian health workers challenges, as I had been in the same situation myself. I was aware of this bias before I started the interviewing and tried not to let this be of an influence in the interviewing situation. On the other hand, having worked with doctors and midwives from other countries before, the communication barrier might be lower for the one who did not have this experience, and in that way it can have made the dialogue with the Malawian informants easier.

Being a Norwegian health worker was a bias in the sense that the Malawians might have looked at me as “one from the Norwegian intervention”. They did, and I often got the question which of the Norwegian hospitals I belonged to. Having the same nationality as the ones that are there for the health intervention could make the Malawians look at me as someone who is biased in my support and in my background knowledge. I emphasized, when I presented myself, that I came on my own, lived on my own and was a student, not a part of the project. Whether this was fully recognized was hard to say, but I don’t think so. The fact, however, that I was present in the hospital several months prior to the start of my interviews can have worked positively towards their understanding of my role. If I had come and started the interviews immediately, it might have been more difficult to distinguish me from the others in the Norwegian team. Now I had had informal talks with many of them, I had spent time in the hospital library and many knew after some time that I was there to do a study, not to work in the maternity ward. Spending time in the field was useful as preconceptions were both refuted and confirmed.

After having been in the field for several months I came to the conclusion that it was wise not to do participant observation in the hospital. I would have had a role that could hardly be distinguished from the other Norwegian health workers and this could influence what the Malawian as well as the Norwegian health workers would choose to say in the interview situation. I also understood that generally it was looked upon as a problem with expatriate staff coming to work in the hospital for a couple of weeks, and then leaving. Really understanding all aspect of the job, being able to do it properly and contribute in a useful way, requires a much longer working period than a couple of weeks. By some, it was looked upon as disrespectful towards the local staff as they were continuously being confronted by new short time health care volunteers. They made it clear that they were horrified over the conditions, but leaving after short time, and thus not grasping the challenging working conditions for the Malawian staff. This dilemma, that extra hands were desperately needed, but that short time workers also had negative influence, were expressed by some health workers outside the interview situation.

Trustworthiness of the study

Some argue that qualitative research should be judged in a different way than quantitative research. Patton emphasizes that judging quality requires criteria, and it all depends on the criteria one chooses to use (14). One of the arguments against using validity and reliability as a way to judge qualitative research is the refusal of the underlying assumption about absolute truth about the social reality. It is argued for a focus on different perspectives and discussion instead of one singular truth. Different sets of criteria for qualitative studies have been proposed depending on what kind of qualitative study it is. A proposed criterion for qualitative evaluations is the following four features; utility, feasibility, propriety and accuracy (14). When it comes to the question of utility this study claims to be relevant for stakeholders as well as staff on the ground in the hospital. Giving the people directly involved in a program the possibility to express their opinion about an ongoing intervention is useful in the sense that it gives them the possibility to reflect on their daily practice. Knowledge on how an intervention is working is valuable for its own sake, and also for people not directly involved in the project. Becoming aware of the strengths and

the weaknesses of the project can help improve the project in the future if there is a will to change among the health workers and program planners involved.

The second criteria, that the evaluation is supposed to be feasible, means that an evaluation should not be done if it is not feasible to conduct it in political, practical or in cost effective terms. This evaluation was feasible. It was done over a period of 6 months in Malawi. This being a student project the time limit for the field work was set by the university to be 6 months. For a professional evaluation it is highly unlikely that this amount of time would be spent in the field on an evaluation, as it would have been far too costly, and also evaluators are supposed to be accountable for how they spend their money. A professional evaluation has been conducted on this health intervention, and their time frame was not more than 10 days of data collection. One of several big differences between this study and the evaluation done by the professional firm Health Research for Action (HERA)(42), is that this firm did not have to apply for any ethical approval. The evaluation was ordered by the Royal Norwegian Embassy in Lilongwe, and was not looked upon as research in the strict sense of the word. This master study on the other hand, going through all the phases that normal research does, used a much longer time frame as the protocol was investigated as an ordinary research protocol. Within a 2- year master programme it was feasible to conduct an evaluation in the way described in this thesis.

The point of propriety regards the extent to which the evaluation has been conducted in a manner that evidences uncompromising adherence to the highest principles and ideals, including professional ethics, civil law, moral code and contractual agreement(14). This study has aimed to follow the principles and guidelines concerning evaluations and qualitative studies. On the issue of moral code it is a principle that no individual is being personally evaluated.

The last point concerns accuracy. This focuses on the point that the evaluation should be precise and say something on what it claims to evaluate. It is the point that is closest to validity, and could be seen as the potentially weakest point in a qualitative evaluation. This evaluation is done by one person and all the interpretations are done by the same person. The preciseness of the study is very dependent on the single researcher's ability to be precise and in that way vulnerable.

Ethical considerations

This research project was approved by the Regional Committee for Medical Research Ethics Sør-Øst, Norway (REK Sør-Øst) in June 2009(see Appendix 1). That is, the feedback they gave was that this being an evaluation of an ongoing project it did not qualify as medical research and did not need any ethical approval. I applied for the Malawian ethical committee; the National Health Sciences Research Committee (NHSRC) in July 2009, and had the protocol returned twice for changes before they finally approved it in November 2009 (see Appendix 2).

The process of getting ethical approval In Malawi was very different from the one in Norway. The NHSRC focused more on methodological issues, and wanted changes both in the objectives of the study, literature review, question guide and data collection method. My intentional plan about doing participant observation in the hospital was refused by the committee, arguing that I could not both evaluate a project and work there at the same time. They meant it would not be possible for me to evaluate the human resource intervention by working there, as I would have had to follow one Norwegian health worker all the time at the hospital, which would have been, practically, very difficult. When reflecting about this afterwards, it might have been better to call the thesis something else than an evaluation. “An inquiry into the health intervention” or “Health personnel’s’ experiences with the health intervention” are alternative titles that I thought might have worked better in the process of getting approval, but these are just speculations. The word evaluation is not a specific term. It can give different associations for different people in different parts of the world. The focus for the Malawian ethical committee was not really about the ethical aspects, as they considered the ethical issues to be minimal in this study. No patients were involved, and that was one reason for them tuning down the ethical aspects of the study. Ethics was linked to quality control of protocols in the way that the Malawian ethical committee expressed it in a research conference where I participated in Blantyre: “Bad research is unethical”. It is definitely an important aspect, Malawi being a country were researchers are coming from all over the world to conduct their studies. The Malawi research committee has, of course, a big responsibility for the quality of the research done in Malawi, as well as making sure

that Malawian interests are taken care of. I obtained a Malawian supervisor, Pr. Chrissie Kaponda, who belonged to the Kamuzu College of Nursing. She greatly assisted me with the changes that had to be made to the protocol.

Informed consent

To gain an informed consent from the informant before starting research is of crucial importance. To obtain informed consent is not only to get the informant's permission or to get a signature on a paper, but it is crucial that the informants fully understand what they agree to participate in. The principle of informed consent, which is a central part of the ethics of scientific research, is just as relevant for evaluations. There are two main principles:

a) People should not be engaged as respondents, informants or participants in evaluations without their consent, and

b) People should be given adequate information about the evaluation, its purposes and possible consequences before they are actively involved(14).

Written informed consent was sought from the study participants before the individual interviews. They were informed about the nature of the study, and were told that their participation was voluntary. It was emphasized that saying no to participate in the study did not have to be further explained nor would it have any consequences for their work at Bwaila hospital or any Norwegian hospital. They were also informed about the objectives of the study and the duration of the study. In this study the informants were given information about the study at least one day before the actual interview took place so that they had time to reflect if they were willing to participate. Those that choose to do so, made an arrangement with me for the interview. Informed consent forms were given to the Malawian health workers in English or Chichewa, depending on what they preferred (Appendix 3). Most of them opted for the English version. For the Norwegians the informed consent form was given either in Norwegian or in English. It felt natural to give the informed consent form in English when the interview was done in Malawi and in Norwegian when the interviews were done in Norway.

Confidentiality

When doing research you are expected to uphold the promise of confidentiality. This means that information obtained during research should not be traced back to informants, or be accessible for others outside the project. Informants should not have to experience that other people confront them with what they said in an interview situation. At the same time it is important that respondents are aware that information is given for a purpose and that it can be quoted. The researcher should do everything possible so that the quotations are not possible to identify with the informants. Also the fact that there are a limited number of participants in this study, and that they are all working in the same environment makes this more challenging. To protect the confidentiality of the informants I;

1) Asked the participants if they accepted that what they say might be recognized by other participants that have been working in the project.

2) I offered them to read the transcripts after the interview. I told them that if there was anything they wanted to remove after having seen the transcripts it would be deleted from the transcripts. Only one person asked to have the transcript read through, and nothing was deleted.

3) I used numbers instead of names when I stored the interviews on the tapes. The researcher who did the interviews is the only one who could link the informant directly to the individual interview. The papers where the number is linked to a name have been kept locked away.

4) The tapes have been stored in a locked place (suitcase with lock), and will be deleted 2 years after the thesis has been submitted in May 2010

5) The transcripts have only been read by this researcher and her supervisor, except one interview by a Malawian health worker that was used in a class setting.

6) Easily recognizable quotations have not been deliberately used in the thesis.

Anonymity

Removing the participants name and other background information can seem like an easy and straightforward task to do. However, Bwaila hospital is not that big, and the

number of Norwegian and expatriate health workers who have been working there is even smaller. I have been considering if I should divide the informants into three different groups, namely Malawian, expatriate and Norwegian health workers to maximize anonymity. The problem as I see it is that the complexity and nuances of the quotations will be lower if the reader does not know what profession the informant has. It is relevant for the study to know that this was said by a midwife or this was said by a doctor. So to be able to give adequate information I decided to use the profession and the nationality (or expatriate) when using quotes.

The role of the researcher

Interaction and face- to face communication is part of doing a qualitative study. A lot of time can be spent with respondents and thoughts and reflections can be shared before the interview is done. This kind of interaction over a period of time can make roles unclear, are you a researcher, a friend, a colleague or a community member. It is not always easy to distinguish between these roles. The biggest challenge for me was to clearly state that I was not a part of the project, or the health intervention. This was not easy, especially when I was doing the “orientation” at the hospital. It was not possible for the Malawian staff to know that I was there in a different role than the other Norwegian health workers. When we talked I told them I was doing a study, so some of them became aware of it after some time. For the Norwegian and expatriate health personnel it was different; they all knew I was there to do a study, not to work in the maternity ward.

Do no harm

When conducting research it is an imperative that no harm should be done to the informants. In this study the risk factors for the informants were considered to be minimal. Talking about their own working situation was even considered by me to be a potential positive experience for them. When talking about personal issues, it can also bring up emotions that can be hard to handle, and I had prepared to sit and talk with them after the interview was over and the tape recorder was turned off if this situation did occur. If there were any severe reactions I would suggest that the informants find a trustworthy person to talk to. This was not necessary, but several of the informants were crying during the interview when emotional issues were discussed. None of the interviews had to be discontinued because of this. Talking

about an issue can have a relieving effect, and my impression was that it was not a negative experience for any of the informants, even though some of them shed some tears. I was also very aware that none of the informants should leave their duty in the ward to come to the interview, knowing how crucial it is that the health workers are present in the maternity to prevent any unwanted outcomes for the patients. I wanted all of them to come outside their working hours. In practice this was difficult to manage as they had 12-hour shifts or were on call the whole day. It was solved in a way that they either had their phone on during the interview (if they were on call at the hospital), or had informed the matron and left the ward in the lunch break. Some of them also came before or after nightshift. Ideally, I would have done the interviews in their spare time, but in this context it was not feasible.

Incentives for the informants

In general monetary incentives are not encouraged in research, it is even considered by some to be completely unethical. The reason behind it is that money should not be a motivation to participate in research. Monetary incentives were still considered for the Malawian health workers, as their salary is low and it is quite common to get allowances for doing workshops or classes during working hours in Malawi. I gave each of the Malawian health workers 1000 Kwacha (50NOK) after the interview, but they were not informed about this beforehand. It was for the inconvenience and to pay for the transport to the place where the interview took place. The Norwegian and expatriate health personnel were not given any incentives to participate in the study. I did not have the impression that the incentives were a motive for the Malawians to participate. They all accepted to participate before knowing anything about the allowance. Only at the end of the interviewing period I got some phone calls from health workers who wanted to join the study. It is possible that they had heard about the incentives, and were motivated by that. At that time I had come to point of saturation, and did not recruit any more informants to the study.

Question guide

I had a semi structured interview guide prepared for my interviews with the Malawians and expatriate health personnel. The interviews focused on their experiences in seeing or working with Norwegian health workers, and if it had assisted the situation in the labour ward at Bwaila hospital.

See Appendix 4 for detailed information.

I also had a semi structured interview guide for the Norwegian health personnel. The interviews focused on their motivation, experiences and challenges working at Bwaila hospital.

See Appendix 5 for detailed information.

The open-ended questions made it possible to understand the world as seen by the respondents. I also probed on the answers I got from the study participants. The follow up questions, or probing, provided a chance to clarify what had been said, and also to go more in depth in the topics.

Data handling and analysis

Qualitative fieldwork involves collecting data through interviews and observations. With this as a background, I have made new priorities on what to focus on, what to include and what to discard. In a way the fieldwork can be seen as a pre-analytical stage, where the researcher becomes more and more aware of trends and patterns existing in the material. The data analysis is a continuous process, and not only limited to the time period after the data collection is finished. The plan was to transcribe and analyse one interview before continuing with the next. In that way, insight gained from one interview could be used in the following. Therefore it was not advisable to carry out more than one interview per day(43). In practice I had to deviate from this plan as I got the permission to do the interviews only 3 weeks before going back to Norway. Some days none of the health workers were able to make it to the matron's office, and some days three of them were available. So I had to be flexible. I did some of the transcriptions in Malawi, and some of them in Norway. The tapes were transcribed and some few additional notes were added to contextualize them. Afterwards, the interviews were read through to get a sense of the content. Both reading the transcriptions and listening to the tapes over again and just writing small notes gave information enough to break the text into meaningful groups. This means that certain parts of the material were focused on as they contained information relevant for the objectives of the study. When preparing to do

my analysis before leaving for Malawi I had made the following plan with analysis in two rounds;

1) To look at the data in relation to the objectives of the master thesis as stated in. and

2) Another approach was to look for new aspects and reflections emerging from the material I am analysing (14) .

Practically this was not as straightforward as I thought. The huge amount of information I received from the informants forced me to prioritise the data that was relevant for my objectives. Many aspects around the health workers working and living conditions came up, but only the ones that were considered to be relevant to my objectives have been included in the findings. The limited time and focus of the master thesis made this limitation necessary.

The parts of the material being related to the objectives of the thesis were first put into broad categories. I coded the interviews and came up with 11 categories that responded partly to the questions asked, and partly to themes crossing the questions in the interview guide. From these 11 categories I made 5 main categories that I have used to present the material. Some of the topics are partly overlapping, but there is a different main focus in each of the main chapters. I chose to use a Word document for each code and put in the wanted quotations as well as the context they were said in.

Findings and analyses

Many different topics came up when looking into the findings of the thesis. There are both aspects of the intervention that the informants are very content with, and aspects where they see a potential for improvement or change. The findings are put into five main categories as I saw this as a natural development of the coding process. The five main categories are:

1) Working experiences at Bwaila hospital

2) Knowledge exchange

3) Communication

4) Incentives and motivation and

5) Suggestions for improvements.

This way of categorization also reflects the objectives of the thesis. The four first categories address answers to objectives number 1, 2 and 3 of this study (see page 7). Findings and analyses under category number 5 aims to address an answer to objective 4 of this study.

Working experience at Bwaila Hospital

Challenges working at Bwaila hospital

Background knowledge about the participant's working experience at Bwaila was gathered in the beginning of the interviews to get a better understanding of the informant's working situation. Many of the Malawian informants expressed that one of the biggest challenges working at Bwaila was the huge overload of patients or lack of staff compared to patients. Being one of the biggest hospitals in Malawi, with more than 12000 deliveries a year, the staff required to meet this need was far from adequate. During my stay in Malawi 3 gynecologists worked at the hospital. In comparison Ullevål hospital has approximately 6000 deliveries a year and 50 gynecologists working there. There exists no universal standard for what a

doctor/patient or nurse/patient ratio should be to be able to provide quality care. A Clinical Officer says that the lack of staff is the main problem faced by those working at Bwaila hospital:

> "We were having previously about 5 clinical officers, and 2 specialists and 1 registrar at the hospital so the workload was high that's why they were having a lot of problems, there are shortage of human resources." (Inf. 12, Male Malawian Clinical Officer)

The extreme shortage of human resources is the main reason for the set up of this human resource intervention. With 5 clinical officers, 2 specialists and 1 registrar he describes a very different personnel situation then what, for example, Ullevål hospital has.

Another point mentioned was the difficulty with the physical division between the two hospitals, Kamuzu Central Hospital and Bwaila hospital, and the time and constrains it took to get from one hospital to another. One hospital being located in two different places makes it difficult for the doctors to attend to patients in time when they have to come for an emergency for a patient. This was the case especially if they were at another hospital than where the emergency was present that day. Not only was the transport of people between the hospitals a challenge, but also the transport of sterile equipment needed for deliveries at Bwaila. This was a problem because the ambulance that did the transportation was operating in the whole area of Lilongwe, and might not be available. This physical division made it difficult for them to do the job required of them and to be able to deliver quality care to the women.

The building in which the labor ward was located was also mentioned as a big challenge for the work itself and for the signal it was giving out to people. This doctor describes how the hospital itself is affecting the people who come to it, patients or workers:

> "It was not a working environment that was conducive to a good professional standard in terms of medical standard and also in terms of how can I say interrelationship standard and ethical standards. I think the building has given a message to both the people who seek help the patients and the people who work there that they and their

> work and their problems are not appreciated" (Inf.21, Male Expatriate Doctor)

The hospital building itself is described as being of such a low quality that it is problematic both in terms of upholding medical as well as an ethical standard. During my stay in Malawi the maternity ward at Bwaila hospital moved into a new hospital with single rooms for all the delivering women. More individualised and respectful care for each of the women was one of the things that wanted to be achieved with the new building. This change in working environment seems to be very positively met when it opened. Most of both the Norwegian and Malawian health workers expressed joy and satisfaction with their new working environment.

Another experience with working at the hospital was expressed by this Clinical Officer:

> "Because there are a lot of expats, doctors and specialists, coming you don't do the work that most of the clinical officers do in the district hospital. The concentration sometimes it goes to the ones that have just come so it's like we are working in a big hospital and we are meeting a lot of cases but practically compared to our friends that are working in the district hospitals they are better than us at that but knowledge wise we know how to do things." (Inf.16, Male Malawian Clinical Officer)

He says that because of the high numbers of expatriate doctors, medical students and newcomers coming to Bwaila, the most challenging work goes to them. As a clinical officer he could feel that he is not being recognized for his skills in his working place at Bwaila hospital. His colleagues working in the district were treating more complicated cases than the clinical officers at Bwaila.

Challenges mentioned by the Norwegian health workers were that the workload was high, but also the fact that work was in their opinion not done according to expected standards. The very different way of treating the women and the lack of hurry towards treating the patients that seemed to be common practice at Bwaila hospital was hard for some of the Norwegian staff. One Norwegian midwife says it like this:

> " When I come to work in the morning, and there is a woman who has been fully dilated for 6 hours that no one has listened to or done

> anything with, things that are basic midwifery, not complicated at all, not expensive.. that is the most difficult" (Inf.19, Norwegian Female Midwife)

Coming from a Norwegian setting with another standard of how a department like this should be run and how patients are being treated is difficult for this Norwegian midwife to accept. She expresses frustration that the protocols are not being followed and that the care in the maternity ward is of a substandard quality. She says that these are not difficult procedures, they just need to be done, and often they are not.

Another aspect that came up regarding challenges at the hospital was a concern by one Malawian midwife that the personnel at Bwaila hospital now more openly were being criticized by patients and the authorities than before. She said that this change had been over the last three years and that this made it harder and more stressful for her to work as a midwife. Even though they were trying to do their best under difficult and very busy working conditions, they were now being more openly criticized for malpractice in the media. Patients who had experienced a bad outcome for their babies had gone to the media, and also the Nurses and Midwives Council in Malawi had been involved in a couple of cases that she referred to:

> "..People think they can say anything to us or criticize us…… you think you are doing what you can do and then someone is not appreciating, it is painful." (Inf. 15, Female Malawian Midwife)

Being criticized for not doing your work according to standard is painful for everybody, and when loosing a patient's life is involved, it is understandable that this must be a very stressful event for the midwives and doctors involved. She explains that being a midwife these days is more difficult than before because of the negative attention they get when a negative outcome for the patient occurs. She explains that the attitude of the patients and the freedom they are given to talk to the media has changed over the last years. She concludes this topic by stating:

> "So we are working, but we are frightened" (inf. 15, Female Malawian Midwife)

This gives some understanding about how mentally, as well as physically challenging the working conditions can be for the Malawian health care workers at Bwaila hospital. The system they work within is suboptimal and the workload is very high. Still the individual health care worker is in some cases held personally responsible for an individual negative patient outcome. This involves the risk of loosing their job and their professional midwifery license. She does say in the interview that the support from the National Organization of Nurses and Midwives of Malawi was very important.

With this as a background, it may increase the understanding of why the Malawian health personnel in some cases "step back" when there is an emergency and let others, for example the Norwegian health workers take over. Being well aware that they are in a vulnerable situation, letting someone else take over the emergency situation can be a way for them to protect themselves.

Challenging conditions working at Bwaila hospital mentioned by the informants are the lack of human resources, overload of work, poor working conditions, suboptimal care given to the patients and negative feedback to the health personnel from patients, media and the Ministry of Health in Malawi.

Positive aspects of working at Bwaila hospital

Even though participants expressed a number of really difficult challenges they faced working at Bwaila hospital it was not hard to make them come up with positive aspects of working at the hospital. One of the things that most of the informants, Malawians, expatriates and Norwegians, mentioned was how much you learned by working at this hospital. Being a referral hospital in a big region in Lilongwe it is a place to gain a lot of skills whether you are a doctor, clinical officer or midwife, Malawian, Norwegian or another nationality. Pregnant women with many challenging and serious conditions come to the hospital every week, testing and challenging the skills of the health workers all the time:

> "You experience a lot of cases and even after working for some months you are experienced when there is condition is like this you know you can do like this, so for experience sake I think it is a good working place. You learn a lot." (Inf. 10, Female Malawian Midwife)

> “The good thing about it is you meet a lot of people, like expat doctors so you learn a lot of skills from some of them and the other good thing is it is a referral hospital so you meet challenging conditions that you do not find in other places.” (Inf.12, Male Malawian Clinical Officer)

These occupational challenges were seen as a positive aspect of working at Bwaila. The informants were well aware that the work challenges at Bwaila were of a standard that requires them to be very highly skilled at an international level. Other positive aspect that was emphasized was that they felt the job was highly meaningful and that helping women to deliver safely was a motivation for them to continue working at Bwaila. The possibility of doing an important job was mentioned as a motivation to work at the hospital. Some of the health workers show that they are strongly guided by their professional conscience when describing their work situation:

> “Me, I like the work with helping the women to deliver, yes, and making sure that they don’t fall into problems. And their dreams, making sure that their dreams come true, a live baby and them also in healthy condition” (Inf12. Male Malawian Clinical Officer)

> “To share the joy of delivery is fantastic and very special at Bwaila because you know that many days you saved a babies life or you contributed to a better condition for the mother” (Inf.20, Female Norwegian Midwife)

> “Seeing a patient coming in pregnant, going home with a baby, you feel happy” (Inf. 15, Female Malawian Midwife)

Both Malawian and the Norwegian health care workers emphasized the importance and joy of doing a good job and striving towards a positive patient outcome as a huge motivation for doing their work.

Another positive aspect of working at the hospital that was mentioned was that there were a lot of friendly staff and that most of them were willing to learn. This idea of willingness to learn was mentioned by a matron who had been working at different places in Malawi. She saw the difference between the attitudes of the staff at Bwaila compared to the places where she had previously worked in the district. This input may show how relative the idea of staff motivation might be in different settings.

Some of the Norwegian and other expatriate health workers expressed that the Malawian health workers were not always very interested in learning new things. However, seen from the perspective of this Malawian matron it seems that they are doing better than in other parts of the country:

> "The staff is friendly and willing to learn, and I think it is the most important thing and the other thing I have seen that it is interesting to work with them and they are committed." (Inf.17, Female Malawian Matron)

The huge learning potential and the importance of the job they did seem to be positive aspects for people working at the hospital.

In this chapter it has been described the Malawian and the Norwegian health workers general expressions of how it is to work at Bwaila hospital. There are both highly challenging and positives sides that are being highlighted by the personnel. This provides a background to understand what kind of working place Bwaila is and what kind of challenges any health worker may face while working at this hospital.

Knowledge exchange

One of the main topics investigated was how knowledge was exchanged between the Malawian and Norwegian health personnel in this human resource intervention. One of the objectives of the intervention was to "support the training of health personnel" and in that way helps to improve the quality of care at the maternity ward at Bwaila. Questions directly asking what they had learned from each other were being used Probing questions about changes, who is benefitting from this intervention, and topics about knowledge exchange were brought by the informants. Different opinions about the level of exchange of knowledge were expressed.

Working attitude

The first objective of this thesis was to look into the views of the Malawian health workers on what impact the intervention has had on their practice in the labor ward and on patient care. A Malawian midwife summarizes what she thinks are the benefits of this intervention:

> “We have an exchange of knowledge, especially the skills on resuscitation on how to make things serious if it is an emergency, see how our friend work, they really mean it, that has motivated us a lot, and for the patients due to shortage of staff them being around us they have helped our patients, that has been good….” (Inf.14, Female Malawian Midwife)

The way that the Norwegian health workers are meeting an emergency situation is being noticed by this Malawian midwife. She describes in this passage that the impatience the Norwegian health workers show on behalf of the patient is something that has motivated her and her colleagues a lot. Responding immediately in an emergency situation is drilled into Norwegian health workers as part of their education and practice. She also describes how the individual patients have benefitted from this intervention by the care given to them by the Norwegian health workers. Another Malawian health worker also emphasizes the fact that the Norwegian health workers are more active in emergency situations than their Malawian colleagues. She states:

> “ I also admire the way they are working, they are seeing a patient and wants to complete….they want ABC now, they take it very strong, they take the result, they rush to the lab, they want the blood, they want the donor, they rush at the same time, but here in the environment here, the samples are going to the lab, lab is not functioning, so what can I do… tomorrow will be an action day, but for them they say NO, we will do it now.” (Inf.13, Female Malawian Doctor)

The different approach towards emergency situations is a key to understanding what this Malawian doctor says she learns from the Norwegian health workers. The Norwegian health workers are coming from a different health system where time is being looked at differently. In a Norwegian hospital setting seconds and minutes count when dealing with an emergency. This female doctor describes that within a Malawian setting it is more common to take a longer time to solve emergencies. It might even be necessary to wait until the next day. This is due to the factors she is describing like the laboratory is not functioning properly, and because of this no blood test results are available. It can also be many other aspects related to the

health system that cause these delays. She expresses feelings of hopelessness and powerlessness when she comments..."so what can I do?" There seems to be a feeling that she is not able to influence the patient outcome, and this leads to a sense of resignation. This different way of approaching an emergency situation is one important aspect of what the Malawian health workers describe as the impact that the health intervention has had on their practice in the labor ward and on patient care. Another Malawian midwife is describes how she sees the work done by the Norwegian doctors:

> "These doctors they do a lot, they are here full time and they don't look at the time to knock off, they work to save someone's life that is what I feel…they are punctual, they come in time, some of the clinical officers refuse to come, they say they will come later, the patient is suffering, that is why the patient is benefitting because they come…" (Inf.15, Female Malawian Midwife)

She describes here that the punctuality and work ethic of the Norwegian doctors is important and benefits the patients in the ward. In comparison to some Malawian health workers the Norwegian doctors are described to be trustworthy in terms of punctuality. The Norwegian doctors are on call in the same way as the Malawian doctors, and this includes night shift. Here one central aspect of the knowledge exchange has been described seen from the Malawian side, namely that they learn about being proactive on behalf of the patient from their Norwegian colleagues as well as about the importance of punctuality. What can be called the Norwegian health workers "working attitude" is being noticed by some of the Malawian health workers. One expatriate midwife also tells that she has reflected about the difference in working attitude between the Norwegians and the Malawians:

> "...because when they first come there is a tendency to think that the Malawians don't work and they don't respond in an emergency and it is not till you have been here a while that you understand this is not the case, they actually do know, but they don't respond in a way that you would, you know ..." (Inf.18, Female Expatriate Midwife)

She says that the Malawians don't respond to emergencies in the same way as the international staff. Both the way the ward is organised and the working culture is a new world for the Norwegian health workers.

Here it has been shown that the working attitude of the Norwegian health workers, which includes both punctuality and being proactive on behalf of the patient is something the Malawians learn from the Norwegian health workers.

Skill transfer to the Norwegian health workers

A preconception in this study was that for the Norwegian health care workers the learning potential had to be huge. They were coming from a well functioning hospital with, in comparison, low morbidity and mortality to a hospital like Bwaila which is very different. This was also confirmed in the interviews. The Norwegian health workers said that they learned a lot by working at Bwaila. They stated that this skill transfer was also part of the motivation for them working at the hospital. Two Norwegian doctors mentioned treating difficult cases like ruptured uteruses, eclampsia and gynecological pathologies that they had never seen in Norway as an important aspect of what they had learned at Bwaila hospital. By treating these patients they gain new and better professional skills. Aspects around Malawian women's lack of rights also come up as a central topic. One Norwegian doctor explains:

> "I learned a lot about serious conditions with uterus rupture and severe preeclampsia, and also about the culture, one gets shocked over the culture, the delivering women they are so suppressed… they never complain… they accept everything..." (Inf.22, Female Norwegian Doctor)

The professional aspects concerning appropriate health care and the aspects around dignity and human rights can be seen as two sides of the same challenge. This doctor mentions her broadened understanding of the lack of human rights for these poor women as a thing she learned by working at Bwaila, as well as doing new medical tasks that she hasn't been exposed to before in Norway. The close link between health and human rights is very obvious when entering a maternity ward like Bwaila, where basic rights like dignity and receiving appropriate care are being neglected on a daily basis.

The Norwegian midwives mentioned doing vacuum extractions, breeches, twin deliveries, manual removal of placenta as procedures they had learned by being at Bwaila, as these are done by the midwives at Bwaila. This is in contrast to common

practice in Norway, where a doctor would be involved. Here it should be said that these procedures are normally done by doctors and midwives together in Norway, with the doctor having the overall responsibility. A Norwegian midwife describes her work at Bwaila:

> " ..To have to trust yourself 110%, there was not always someone to call for, you had to be the one who took the decision, at least to a high degree because you might not have people who were qualified to help you, and the fact that I have done vacuum deliveries, breeches, twins and manual removal of the placenta, I never do this in Norway, but I did that a lot at Bwaila after a while…vacuum, breech, twins is very common there." (Inf.20, Female Norwegian Midwife)

This midwife says that she really learned to trust her own skills at Bwaila, as she didn't always have someone to discuss difficult cases with, something that most often would be the case in a Norwegian setting. This possibility of having a different area of responsibility than in a Norwegian hospital is one thing that she mentions learning while at Bwaila. In Malawi, many of these procedures were done by the midwives or the clinical officers. This was mainly due to the lack of doctors to perform these tasks in many hospitals. In the literature review this was referred to as task shifting. This presents another challenge, that is that the responsibilities for the Malawian and the Norwegian midwives are different in their natural home settings. How to work together and when to refer patients to the clinicians in a hectic maternity ward is an ongoing discussion. This Malawian midwife describes the difference in how patients are managed by the Malawians and the Norwegians:

> "I think there is a slight difference how we work according to my experience and what I have observed in them, most of the harsh conditions are managed by the clinicians in Norway but here it is the opposite, when we manage this patient they say we have mismanaged because we are not suppose to handle this one… we say no when we are doing midwifery we are taught to manage these abnormal conditions…" (Inf.26. Female Malawian Midwife)

Which patients to be taken care of by which cadre of health worker are what she explains as an ongoing discussion. Where a Malawian midwife would find it natural to handle the patient themselves, the Norwegian midwife would find it natural to call

for a doctor. Both are responding in the way that they have learnt is midwifery practice in their setting, according to this midwife.

Here we have seen that the Malawian health workers learn about how to tackle an emergency situation from the Norwegians. The Norwegian health workers, on the other hand, mention both technically new task as well as , expanding their area of responsibility and getting an understanding of the human rights violation that the Malawian women often experience when delivering their babies, as things they learnt at Bwaila. When to refer a patient to a clinician is also an ongoing discussion.

Reflections around skill transfer

One of the main objectives of the intervention is " To support training of health workers and birth attendants in Bwaila hospital in maternal health and safe motherhood"(12). The way this is described to be done in practice is bed-side teaching, or one to one teaching between one Norwegian health worker and one Malawian health worker or student. Some discussions have arisen around what is considered to be the best way of teaching. The thoughts about how this could best be done have differed between the various groups of informants. One matron says that organized classroom teaching is not really what they need at Bwaila. The hospital being a teaching hospital where students and other Malawian students should have the priority to teach, and in that way practice their skills in front of an audience, as well as learning about a subject. This Malawian matron describes why bedside teaching on the ground is something they need and want help from the Norwegian staff to achieve:

> "Because we are a teaching hospital so we have these intern doctors who are coming to the department so priority is given to them because it is also a learning session for them, they learn to teach, but they also learn what they are teaching on a particular topic, so most of the time I have seen the priority is given to the intern doctors… I don't really think that classroom teaching is something we want here in the hospital, it is not really focused on education as it is on the work on the ground, I think that is were our need is." (Inf.11, Female Malawian Matron)

It is the work on the ground, the bedside teaching that is considered most important by this matron. There seems to be a system in place already to organize training sessions with the intern doctors, but few people to teach one to one in the ward. She mentions something called Continuing Professional Development(CPD), a program to ensure that health personnel in Malawi keep up-to-date and improve their skills(44). So they have, at least in theory, a system that is keeping them updated on theoretical and professional issues. Another expatriate doctor also emphasized that health workers who are teaching by example are what are needed. He also thinks that this method of bedside teaching is the best one:

> "In general I think you should work, do your work well, and talk about it while you work, I think that is the best teaching…the biggest impact of teaching I think is the teaching by example…" (Inf.21, Male Expatriate Doctor)

He is emphasizing teaching by example as a very good way of teaching, maybe even superior to classroom teaching. So both of these two health workers are highlighting the 'role modeling' way of teaching as a kind of training that Bwaila hospital is benefitting from and needs more of. These two informants both have leadership responsibilities at Bwaila hospital, and will therefore see the needs of the hospital from that perspective. A contrasting view comes from a Malawian midwife who says she would like to see the Norwegian health workers do more classroom teaching:

> " Maybe if they could conduct some short courses internal courses on certain topics as one of the gynecologists come here, teach his friends, share ideas that would also be good, some sort of training." (Inf.14, Female Malawian midwife)

This Malawian midwife would like to have some training done by the Norwegian clinicians; the idea of sharing ideas in a different forum is appealing to her. The Norwegians on the other side did bed-side training and teaching of students in the ward. They considered this a relevant way of transferring and exchanging skills. It was not specified in their working contract how skill transfer should happen at Bwaila hospital. Doing more organized training sessions would also have the consequence that they could not be present in the labor ward to the same extent. We have here

seen that different views are expressed about how skill transfer could be best practiced in this intervention.

Differences in midwifery practice

How to practice midwifery came up as a topic in the interviews. In general midwifery guidelines are universal, but there will always be national and local adaptations on medical procedures. Still, a respectful approach towards the delivering woman and a healthy outcome for both mother and baby will of course be central in any midwifery practice. A couple of the Malawian midwives said that they learned to encourage women to use different delivery positions from the Norwegian midwives. They were not at all used to letting the woman deliver her baby in different positions. In that way the Norwegian midwives had introduced something new to the maternity ward. A Malawian midwife describes how she perceived the introduction of varying delivery positions from the Norwegian midwives, from the beginning of the intervention and how her attitude changed:

> ”Inf: like the two years I have been in the labor ward when these Norwegians started coming they encourage the positions the delivering positions... the delivery positions you know in Malawi we don’t change the position, the woman should be in bed, flex the legs
>
> ME: the traditional?
>
> Inf: yeah, but with the Norwegians they encouraged ambulation, standing, sitting, so at first it was like, I don’t know, what are they doing, they are abusing our women… but later we started liking the positions because it is somehow more comfortable than the traditional way.” (Inf. 10, Female Malawian Midwife)

Letting the woman choose a delivery position herself is common practice in Norway as long as everything is normal and well with the woman and the baby. However, this has not always been the case. Thirty years ago the view of delivery had more of a surgical approach in Norway and it was common practice to have the woman in stirrups when she delivered, even for a normal birth without any complications. There has been a change towards a softer and more patient centered approach

towards women delivering in Norway (and many other countries) in the last 30 years. This may be seen as a way of empowering women to let them be more in charge of the situation, where they do play the main role. It is about who is in power, the laboring woman or the health worker assisting her. This more holistic approach towards delivery is one of the things the Norwegian midwives seem to try to introduce into the maternity at Bwaila. One Norwegian midwife emphasized the joy and satisfaction of giving Malawian women the chance to deliver naturally and with support from both the midwife and family members. She explains a situation were a normal delivery has been conducted and the wishes and needs of the delivering woman have been respected and listened to:

> "…I had cleaned the room and put the mattress on the floor, it is unnatural for many of them to sit on the high beds, she (the pregnant woman) moved around in a way that was natural for her, and her mother supported her and stroked her on the back, and it was a moment where the world is standing still and you feel the happiness in every cell of your body because it is so beautiful." (Inf.19, Female Norwegian Midwife)

The delivery described in this quotation was done at the new Bwaila hospital where individual rooms, for every woman, give the possibility for more patient centered and holistic care. The wish of giving the Malawian women both a safe and good delivery experience seems to be an important aspect of the professional agenda of the Norwegian midwives. She describes the importance of letting women deliver their babies in dignity and with emotional support as an important professional aspect, and something that she is encouraging during her work at the hospital. This focus could be seen in the light of women's reproductive and human rights as well, as a way of empowering women who are powerless. Women in Malawi are among the poorest women on earth, and most of them do not speak up for themselves. Working in a hospital with big challenges regarding suboptimal functioning systems, equipment and number of staff available, a focus toward a respectful and good birthing experience for the poor women can be a goal in itself for the midwives. In a situation where many things regarding providing quality care are out of reach for the midwives, the way they treat the delivering woman is where a difference can be made by a single individual. This approach is seen as a way to show respect to and

value the woman. Letting the woman decide by herself how she wants to deliver her baby is the gold standard within midwifery practice and is how women should be treated if everything is normal with the baby and the mother. For serious conditions, where interventions are needed, the procedures and the priorities are of course different, even though a respectful approach towards the patient is always of major importance.

In my group discussion with Malawian midwives in Norway the different delivery practices between the two countries was discussed. Some of them commented that even though varying delivery positions were not a topic during their midwifery education, the focus on respect, care and a holistic approach were a major focus during their training. They emphasized that the possibility of practicing the skills and approaches taught was highly dependant on the system they worked in. One of the midwives used the Malawian midwives working in the United Kingdom as an example of that; the transformation takes place when the health system they work in changes.

In this chapter we have seen that the Norwegian midwives approach centered on a more holistic and respectful attitude towards the delivering women is being recognized by some of the Malawian midwives, and that it is looked upon as positive for patient care.

Patient management

The attitude of having a holistic approach towards the delivering woman is also relevant when it comes to general patient management. Some of the Malawian informants say that the Norwegian's approach is different from the Malawian. These quotes show what some of the Malawians think about their own patient management compared to what the Norwegians have introduced:

> "The patient management because you know we also learn from her (the Norwegian midwife) when she is doing it, she can start with managing a client with 3 centimeters and be there up to delivery most of us Malawians are not able to do that, because we are not able to remain with the same patient for some hours or so, we examine… then we go off for another patient and we don't come back to this one" (Inf. 14, Female Malawian Midwife)

> ” she demonstrates the importance of individualized care, us you know we work for we go for quantity not quality” (Inf.10, Female Malawian Midwife about a Norwegian midwife)

These two Malawian midwives describe the lack of continuous care given to a delivering woman at Bwaila in general. They describe that the women are being better followed up by the Norwegian midwife. The comment regarding quantity and quality is important, as conducting a lot of deliveries in one day does not indicate anything about the quality of the work done, or if one has contributed to a better patient outcome. A substandard level of care seems to be common practice in the maternity ward, not as a choice, but as a result of few resources and a non-functioning health system. The different approach towards the women is an interesting and important aspect of the knowledge exchange in this intervention. The Norwegian midwives come from a setting where individualized care is a main focus. The caring attitude towards the delivering woman is both learned at college and is the only culturally accepted way to treat patients in the hospitals in Norway. Having good bedside manners is expected of health professionals in Norway. This attitude includes showing respect for the patient, listening to the patient, and acting according to the needs of the patient. I understand this approach is valued in judging quality of care in this health intervention. One of the objectives of the health intervention is to help to “increase safety of pregnancy and delivery at Bwaila hospital by instituting the implementation of effective interventions in the management of pregnancy at the hospital”(12). A closer follow up of the delivering women is a step on the way to increasing the safety of delivery at Bwaila. In a maternity ward in a Norwegian hospital there is a goal that a woman in active labor should be able to have a midwife present in the room if the woman needs this. This means that the midwife/patient ratio in a Norwegian setting many places is 1 - 1 for women in active labor. Being able to practice this care ration in reality, responding to the patients needs, is of course an ideal starting point to reach a high quality of care, even though it is no guarantee in itself. In Malawi, the setting is very different, with a midwife/patient ratio that can be 10-1. It is not difficult to see the differences in challenges for the midwives in the two different work environments. This huge difference in staffing in the ward should be taken into consideration when the attitudes among health personnel are being looked into. Both the staffing ratio and

what is seen as a culturally accepted behavior will influence how the midwives are treating the patients. The Norwegian midwives have the ability to practice high quality midwifery care in Norway because the resources and the will to prioritize the women's health and wellbeing are there. They take these skills and their motivation with them to Malawi and try to incorporate it in a huge maternity ward that is highly understaffed. One Norwegian midwife says:

> " I felt that taking care of the women in labor, of all the aspects, that you stay close to the bed, support the woman, encourage them, tell them that they are doing great and that they are worth something, we want to promote the good childbirth, and then hope that the Malawians could be inspired by us." (Inf.20, Female Norwegian Midwife)

My understanding is that this attitude, the different approach towards the patient is being recognized and appreciated by some Malawian midwives. They see it and they like the way the Norwegians treat the patient. To what degree Malawian health workers are able to integrate this caring attitude themselves is a different question, but in general it is likely to be both dependent on the individual person and the health system that they work in. Patients are not being well looked after in the maternity ward at Bwaila hospital, protocols and guidelines are not being followed due to lack of both human resources and lack of a well functioning health system. An expatriate doctor explains the critical situation as follows:

> "We have a very thin layer of people we are really marginal and because we have been marginal for decades, they (the Malawian health workers) do not think this is marginal they think it is normal, and they completely lost a vision of a good department, they have never seen a good department in their life, they do not know what is a good department and this is difficult to establish." (Inf.21, Male Expatriate Doctor)

The medical standard between a hospital like Oslo University Hospital in Norway and Bwaila hospital in Malawi is enormous, and for the Malawian staff it is an extra challenge that many of them have never experienced a well functioning hospital. Therefore, it is more difficult to see what should have been improved. This is an important reflection around understanding how working in the maternity department

is viewed by the different nationalities. The professional exchange of knowledge has to be seen in the light of the different backgrounds that the different health workers have.

Division of work

When people coming from different working contexts start working together, it is quite normal that discussions around how to work together will be an issue. Addressing the question of how the Malawians and the Norwegians actually work together one Malawian midwife said:

> "They are most useful and most helpful in the areas going to the theatre, they take them there and deliveries, they do conduct deliveries and if there is a tear or episiotomy they do suture as we nurses doo, too. All the things we work hand in hand." (Inf.14, Female Malawian Midwife)

She describes the Norwegian health workers efforts as most useful, and says that they are working hand in hand together in the ward. The difficulties for the Norwegian health workers coming to a completely different setting with less equipment and resources available is also being recognized by one of the Malawian doctors. She describes the dramatic change in working situation for the Norwegian staff like this:

> " There are some Norwegians that have even cried, because the patient is bleeding and they cannot do anything, they are not used to that, but by now they know the limitations, and there is already one patient in the theatre so how, we cant rush, but first when they come they think it is like home, but at the end of the day they find that the patient is still alive, I am also saying them that here we work in the grace of God, not that we have everything, but I think that God is also doing a lot of work for us.. " (Inf.13, Female Malawian Doctor)

The limitations at the hospital are hard to accept when first arriving, but as this doctor says, after a while they get used to the completely different working conditions and adapt. Having to take the chance that a woman is bleeding to death because the only functioning operating theatre is occupied is a new situation for the Norwegians, but a normal situation for the Malawian health workers. The quote

about working in the grace of God was included because most of the Malawians are strongly religious, and believe in divine assistance. How to act in an emergency situation and work in general might be interpreted a little bit differently between the two groups. These quotes show some of the challenges the expatriate health workers felt they faced when introducing their way of working:

> ” I thought maybe that they would have taken after us, that they would work a little harder” (Inf.20, Female Norwegian Midwife)

> “..Many of the Malawian seems to see this support from outside as an excuse not to come to work, and that is the biggest problem.” (Inf.21, Male Expatriate Doctor)

These two quotes suggest that the division of work between the Malawian and the Norwegian health personnel is not optimal according to the informants. For several of the Malawians this Norwegian human resource intervention is seen as a relief intervention in tough times. One of the Malawian health workers described the intervention as follows:

> ” They help to reduce the congestion of workload here”. (Inf.14, Female Malawian Midwife)

These can be interpreted, in a way, as sharing the patients in between them resulting in more time for each patient, and adding a number of staff to try to improve the quality of care. However, it can also quite literally be understood as doing the actual job with the patient who makes it possible for another to do something else instead. This understanding of what the gap-filling function should include might be viewed differently for the different nationalities but also within the different health professions. For the Malawian midwives and clinical officers, that in general are overworked and underpaid, an extra pair of hands are welcome either to make the working day a little less stressful, but also maybe give them a chance to do something else, like going to a workshop, or do some private errands. The dilemmas that the Malawian health workers face are that which bridge professional and private interests. The low salary compared with high living expenses and responsibility for big families makes the dilemma difficult, with negative consequences either way. One health worker describes it like this:

> ”As I have already told you maybe we try to find some ways of sustaining ourselves, so its like when I have finished my work I have done my work for example at antenatal and I have seen that the ward is quiet, maybe I will be tempted to sneak out and do ABC to try to make profit and come back maybe after 2 or 3 hours” (Inf. 12, Male Malawian Clinical Officer)

As mentioned in the literature review, the quality of life of the health worker has to be taken into consideration when looking at the quality of care in a health setting. When this is not being met to a sufficient degree, this will influence the way work is being practiced in a hospital. This clinical officer explains that he sometimes chooses to leave his work to try and make a profit somewhere else.

Here it has been described that some of the Norwegian or expatriate health workers think that the Malawians do not always show up to work when the Norwegians are present in the ward. This is seen as a problem. Some of the Malawians say that they work hand in hand with the Norwegian health workers, and appreciate their assistance.

Technical aspects

The Malawian health personnel also expressed different views about what they learned from the Norwegian health workers. Several of them mentioned the use and interpretation of the Cardio-Toco- Graph (CTG) machines as an important thing that they had learned from the Norwegian health workers. In sum, the CTG machine registers the fetal heart rate and the mother’s contractions. It is a frequently used method to monitor the fetal wellbeing. It was understood that Bwaila had a CTG machine before the Norwegian intervention but it was not functioning. With the Norwegian intervention came a functioning CTG machine and they started using it in the maternity ward under supervision of those who knew how to use it and how to interpret the results. This supervision was mainly done by expatriate health personnel. The use of CTG is not part of the midwifery or medical education in Malawi; they use the fetoscope to check the fetal heart rate. So with the introduction of technical equipment like a CTG machine, the Malawian health personnel in the labor ward learned how to use and interpret the results of this machine. Some of the Malawian health workers expressed that this kind of teaching was positive and looked at it as positive to be able to learn new skills and use technical equipment in

the maternity ward that could help to improve the quality of care. This midwife expressed her enthusiasm for the CTG machine that has been introduced in the ward, as well as the patient management of the Norwegian staff:

> "It has been so good, for example some of us we didn't have knowledge on CTG how to use them when they came they taught us we even exchange the way how they work there. When we saw that they were really competent, they know what is emergency and they help us to boost our skills like we should put much effort in what we are doing" (Inf.14, Female Malawian midwife)

One of the Norwegian midwives said that she wished that there were more organized teaching sessions around the use of the CTG machine. Doing one to one sessions to teach how to use and interpret the CTG was, according to her, not sufficient to make the whole staff able to use it correctly. When introducing this new machinery in the ward, some organized training should be included to avoid mistakes and misinterpretations of the results. She was worried that if the CTG machine was used by non-skilled health workers it might lead to wrong decision making like for example unnecessary c-sections in the ward. This was an argument for having organized training sessions outside the ward, and not only bedside teaching with the individual health worker. Bringing the CTG machine and teaching the Malawian health workers how to use it was one technical aspect of the intervention that was considered positive for the health workers labor ward practice and patient care.

Another technical asset that was brought to the maternity ward and that was considered to be of very good use by one of the midwives was the Kiwi. The Kiwi is a small device that functions like a vacuum extractor. But unlike the traditional vacuum extractor where two health workers have to be involved, one to pump and one to hold the cup and pull out the baby, this instrument requires only one person for the whole procedure. This midwife describes how much easier extractions are when you can do the whole procedure on your own during, for example, a busy night shift. With many deliveries and few staff, being able to perform a vacuum extraction procedure alone is considered positive by her:

> “The Kiwis, they bring them, it is easy because it is only one person who can use the Kiwi unlike the old one which we had like this night we were only 4 midwives so when someone is busy you can not tell come and help me pumping, but for the Kiwi you are doing it all yourself, and the baby is coming out..” (Inf.15, Female Malawian Midwife)

The Kiwi is originally a single use instrument, but because they have them in limited numbers and they are considered very useful, they use them over again.

> “Its single use, but in the labor ward we use it again, we sterilize it “(Inf.15, Female Malawian Midwife)

This seems like a rational thing to do. Compared to a Norwegian setting, where this kind of equipment is available on request, in a Malawian setting one has to take care of and also reuse important equipment. This midwife considered the possibility of doing a potential life saving procedure like a vacuum extraction on your own as very positive. Other useful things that were brought to the maternity ward were also being recognized and appreciated by the Malawian staff. This Malawian midwife describes how much easier it is to get new equipment to the maternity ward from the Norwegian team than through the bureaucratic system of the hospital:

> “There are a goodness which we don’t have, like the lamps, for us something to be purchased it takes months you have to write a letter to the senior, and another should countersign so it takes long, but they come in oh, what, don’t you have this don’t you have that, they come they buy it quickly so its like we are being helped a lot by them “ (Inf.14, Female Malawian Midwife)

The Norwegian health workers are in a financial situation were they can assist in getting equipment to the hospital in an effective and quick way. This is seen as a relief for this Malawian midwife, not having to go through the whole “chain of command” to get something as simple as a new lamp for the ward. As well as buying equipment, baby clothes are also mentioned as items that are benefitting the patients at the hospital:

> “ They are bringing in these baby clothes, especially in the cold weather we have been having baby clothes and all the mothers

> delivering here they are receiving this baby clothes, so generally we are benefitting a lot." (Inf. 15, Female Malawian Midwife)

Baby hats have been knitted by private persons in Bergen and clothes have been collected and sent to Bwaila hospital by Haukeland Universitetssykehus. This initiative is being well recognized by several of the Malawian midwives, and one midwife even said that patients are coming to the hospital to deliver their baby because they know they will receive the clothes. In that way the clothes may work as an incentive for the women to deliver in the hospital. Bringing drugs to the hospital is also mentioned as a technical aspect that makes this intervention valuable:

> "Sometimes we don't have drugs they do communicate if there is someone coming from Norway, they bring drugs like Hydralazine if we don't have Cytotec sometimes they do bring that, so that has also helped us a lot." (Inf.15, Female Malawian Midwife)

The two drugs she mentions are important drugs used in a maternity ward to treat severe pre- eclampsia and post partum bleeding. This unconventional way of getting needed drugs to the hospital is appreciated and seen as a valuable contribution for the staff to be able to perform their duties in a good way.

It was emphasized in the preparation of the interview that our discussion was only about the human resource part of the intervention, not any other parts of the intervention like, for example, sending equipment. The impression was still there that several of the Malawian and the Norwegian informants also included the parts of the intervention related to sending equipment when they made comments about the usefulness of the intervention. For them it seemed to be meaningful to look at the aspects of the intervention as a whole, not only thinking of the human resources in isolation. The expressions in this chapter about the usefulness of the technical equipment are a sign of that. This is highly reasonable, and shows that a small academic approach towards an understanding of a topic can be viewed differently by the people directly involved in it.

Here we have seen that the additional equipment, clothes and drugs that are being brought to the maternity ward at Bwaila hospital are welcomed by the Malawian staff as an addition to the human resources implementation.

Communication

In an exchange program with different nationalities it is natural that language barriers and communication challenges are a topic that emerges. English is the official language in Malawi and is the teaching language at universities and colleges. In Norway most people with a higher degree of education will speak enough English to make themselves well understood at a maternity ward. It became clear during the interviews that other languages than English are being used in the maternity ward when health workers communicate with each other. From some of the Malawian health workers it was being said that the Norwegians sometimes had a tendency to speak Norwegian between themselves when conducting deliveries together. It made it difficult to communicate with them and could have a kind of excluding effect on others in the ward. Everyone who has been in a country where they don't know the language and hear it spoken in your presence, not understanding a word, would know the instant feeling of being left out of the conversation. In my experience this feeling is more prominent when you know that the people around you actually are able to speak a common understood language, but choose not to.

> "Sometimes they can't avoid that when there are two or three of them together they will talk Norwegian" (Inf.11, Female Malawian Matron)

This matron expressed an understanding for the situation that the Norwegians were experiencing in Malawi. She tones down the importance of this topic. She can even identify with them. She shows with this quote her insight in what it could be like for her to be working in a totally different country:

> "Even for me if I went to Norway today, I feel like maybe a stranger you know in Norway, and the only person I have is my fellow Malawian, so there is a tendency for me to call my friend and see and we talk our language and you know I will remember my home, but that is not an issue here, you understand what I mean, it is not a very big issue." (Inf.11, Female Malawian Matron)

The issue of speaking Norwegian in the maternity ward has been debated and the Norwegians have been told that this should not happen as it makes communication and teamwork difficult. From the perspective of the Norwegian health workers being

visitors they also face the challenge of a language spoken around them that they don't understand:

> "There are many challenges sending people from one part of the world to another regarding culture and not at least language; the health workers talk a lot of Chichewa together in the ward" (Inf.25, Female Norwegian Midwife)

One of the Norwegian informants also said that she had the feeling of being talked about in Chichewa by her Malawian colleagues in her presence, and expressed the insecurity around what they might have said about her. This shows that there is some tension regarding languages used in the maternity both regarding use of Norwegian and Chichewa, which may be creating unnecessary distance between the health workers. Seeing this challenge of language in relation to my objective of looking at "what impact the intervention has on their practice in labor ward and on patient care", the speaking of many languages in the ward might be an obstacle to communication and together improving the practice in the labor ward. Bwaila being a hospital with many expatriates and students could possibly benefit from a continued emphasis on English to be the spoken language between health personnel inside the hospital.

When it comes to the language used to communicate with the patients the Norwegian health workers get help from their Malawian colleagues to translate Chichewa to English and vice versa. This is understood not to be a problem, and functions as a part of the daily interaction between the Malawians and the Norwegian health workers. It makes it easier for the Norwegians to assist the delivering women in a beneficial way. The Norwegians are dependent on having Malawian colleagues in the ward to translate what the patients are communicating.

Incentives and motivation

Motivation and Incentives for the Norwegian health workers

As discussed in the literature review both monetary and non-monetary incentives are important when it comes to health workers performance and job satisfaction(45).

Being well aware that the incentives for working at Bwaila hospital were very different for the Malawian and Norwegian health workers, this was thought to be an issue of concern for the Malawian health workers. One of the questions in the interview guide to the Norwegian health personnel was about their motivation to go to Malawi. No direct questions about the Malawians motivation for doing their job were present in the list of questions asked, but information about this topic was gathered from other questions. From the Norwegian side in general the motivation to go abroad was high. This is a natural part of the selection process, as joining this human resource intervention is voluntary, and only the highly motivated doctors and midwives working in the Norwegian hospitals will sign the contract and go to Malawi. Several of them said that this was something that they had wanted to do for a long time, and in that sense it was a dream comes true for them to experience working in Africa. They were motivated by a number of factors, seeing a new continent and a new country, experiencing a new culture as well as the professional experience they got at the hospital:

> "Because I am very fascinated by Africa, and I think I have become curious and interested in working abroad, it is something I always have wanted to do" (Inf.24, Female Norwegian Midwife)

The ones, who said that this was a dream, mentioned travelling to Africa as being the dream and not Malawi in particular. That Norway and Malawi are far apart geographically is described by this Norwegian midwife:

> " I hardly knew there was a country called Malawi before it was brought up, I had never heard about it, so I had to find the atlas and find out were in Africa it was located" (Inf.20, Female Norwegian Midwife)

The motivation was to go to Africa or another developing country to work as a health worker. The different activities that could be done in your leisure time in Malawi were also mentioned by a few, even though it was not at all the most important factor. Being able to have a big impact on your work, that what you did really made a difference between life and death for the women, was accentuated:

> "You have the chance to make a truly meaningful impact in the lives of our patients and that is good" (Inf.21, Male Expatriate Doctor)

Hospitals, like Bwaila, have daily situations where there are women and children in need of life saving interventions. The huge learning potential for the Norwegian health personnel was also a motivating factor:

> " I get a lot of training, get it into my hands ,the impetus is to travel and learn basic midwifery skills and natural births without all the influence that exists at home, just to experience it" (Inf.24, Female Norwegian midwife)

Seeing and treating medical conditions that you would never experience in Norway was seen as a way to improve their own professional skills. The learning curve for the Norwegian health workers is described as steep. They get an experience they would never get in Norway, as many of the medical conditions the Malawian women are facing, will be treated at a much earlier stage in Norway. The total impression was that the health personnel from Norway who went to Bwaila hospital to work were highly motivated and felt that there were a lot of positive challenges in this human resource intervention for them. In comparison to an organization like Doctors without Borders, where the health worker has to commit to work as a volunteer with highly reduced salary to become an expatriate health worker, this intervention offers almost a normal salary for the midwives, but a reduced salary for the doctors. For the Norwegian midwives there is not a big decrease in salary when working in this intervention, this will be bigger for the doctors, since they where equally paid with 30000 NOK a month. This difference in payment compared to ordinary salary might be a reason why it has been easier to recruit Norwegian midwives than Norwegian gynecologists to work at Bwaila.

The motivation to work at Bwaila seems to be very high for the Norwegian health workers. Non-monetary incentives like seeing another continent, learning a new culture and many new medical skills seem to be important motivating factors. The financial incentives do not seem to have a de-motivating effect for those who choose to join this intervention, but might exclude Norwegian doctors from joining in.

Motivation and Incentives for the Malawian health workers

From the Malawian side it looked quite different concerning both motivation and incentives. They work permanently in a hospital that is completely understaffed and their salaries are very low compared to the cost of living in Malawi. Both the financial

and non-financial incentives where low and didn't encourage them to do a better job. Many of the Malawians missed incentives in their job; they had instead what one health worker called negative incentives. With negative incentives she meant things like low salary, hard working conditions, having to work overtime to sustain you, few possibilities of advancement, shortage of equipment and so on. Very generally a month's salary for the Malawian health workers would be on the scale of 1000 NOK to 3000 NOK a month. This is not enough to sustain themselves and their family. One Malawian mother and midwife describes her working situation and how earning money is of major importance when it comes to her motivation to work. She compares her own low salary to that of the people working with The United Nations Children's Fund (UNICEF), and is disappointed with how little they earn at this government facility. The locum she describes is the extra shift that the midwives take in addition to their normal days of working in a week. They do these extra shifts both to earn extra money, but also because the lack of staff makes it necessary to be able to run the maternity ward. The dilemma is she needs to rest; she has a family to take care of, as well as her work at Bwaila hospital:

> "We are not boosted up the moral of working, we prefer to have a business to make money,…we have part-time job which are locum duties, we work from morning till evening, we are given 1200 kwacha the whole day, but our friends who work in UNICEF get about 4000 kwacha an hour, but for us… and we work the whole night in a big hospital, and for us the labor ward is difficult because it is always busy, it is always tiresome, we need to rest, so the chances of working locums we are not able to do that, we also have to look after our family. " (Inf.14, Female Malawian Midwife)

The ward is so busy that it is common that one midwife might deliver up to 10 babies a day. In a Norwegian setting it is not common that a midwife would deliver more than 1, maybe 2 babies on a shift. The very busy working conditions at Bwaila hospital are being experienced both by the Norwegian and the Malawian health workers. The amount of hours they are working per week and the incentives they get for working there are what are different. The very different working conditions are being noticed by the Norwegian health workers as well. One Norwegian midwife describes the differences in the working and life situation between them like this:

> "The enormous amount of time they work, they have to work, many of them are so tired, they haven't slept properly maybe for years, and I feel really sorry for them, I would never have managed, I don't understand how they can make it… I work more here than I have ever done at home, but at the same time I work half of what they do...they are forced to do it, to survive." (Inf.24, Female Norwegian Midwife)

The workload for the Malawian midwives is described here as being double the workload of the Norwegian midwives at Bwaila hospital. This is an important finding as the cooperation and teamwork between the Norwegians and the Malawians is a central point regarding the success of this intervention. The Norwegian health workers can, with their high motivation, be a role model in how to treat patients according to western standards, but the very different life situations of the two groups should be taken into consideration when trying to understand the internal dynamic of how this cooperation functions. To get enough money to provide the basic needs for their families seems to be a main focus for some of the Malawian health workers at Bwaila regarding their job motivation. Midwives, clinical officers and doctors express this in the interviews. This doctor says:

> "Sometimes at the midmonth that time you don't have anything at home you don't have the money for transport … so from the middle of the month you come late, you knock off early…" (Inf.13, Female Malawian Doctor)

The lack of money for this doctor to sustain herself and her family make her not be present at work all the time. The big difference in incentives, both monetary and non-monetary, between the Norwegians and the Malawians was thought to be an issue of concern for the Malawians. In the literature review articles about mid-level provider's motivation and experience of their working place was presented. Treating health workers differently in terms of benefits was in general not appreciated by the staff. But the feedback from some of the Malawian staff was that the Norwegians were paid by a different government, and in that way this was not really any of their business. The competition for Malawian health workers was within the Malawian setting, like between people working in private hospitals or NGOs compared to a government salary:

> "Yeah its okay but the only demotivating is within the Malawian set up, you know you are at Bwaila, you see this Queen hospital, you see your friend , of course there are some that go as far as UK, but it is not many. The competition is within the Malawian setup. " (Inf.10, Female Malawian Midwife)

She does not really compare herself with the Norwegians in terms of salary. Private hospitals and NGOs pay in general a much better salary and that is also one reason why many choose to leave the government hospital after a short period of time. A contrasting view concerning the difference in incentives is expressed by these 2 Malawian midwifes who think that differences in incentives are something they are not completely satisfied with:

> "I would say in a way, if you are taking the same workload I think there should be no difference in salary… if you are in the same class and they have more, sometimes it is better not to talk about it, it is better to be happy with what you have…" (Inf.14, Female Malawian Midwife)

> "We feel, we sympathize for ourselves, but looking at our culture and our status we have been brought up in this status, we don't say much, we just obey to how we live." (Inf.10, Female Malawian Midwife)

The first quote expresses the difficulty around talking about these matters, and that solving them is outside her capacity. The second quote describes a midwife's feeling around how she sees her status. The difference in salary is a huge topic within different health care facilities in Malawi, and she tells about a friend who is a nurse who earns double her salary in an NGO in Lilongwe. Both the low salary and the poor quality at the hospitals are a national concern and an international concern as well. NGOs and Governments are trying to assist the Malawian Government to improve their maternal health services, but the issues around incentives have not been solved. When differences in benefits were discussed, a Malawian matron described the different situation like this:

> "Maybe the only difference is that the Norwegian midwife maybe when she knocks off she can go to a pub, maybe relax, maybe over the weekend she can go to the lake, you know enjoy herself at the lake, and that I find it will be different, unlike the Malawian midwife, she is stressed, the workplace, when she goes home she is stressed, she

> has to look after her family, she doesn't have enough money to entertain herself or any recreation, but that's were I find the difference but in terms of the work I feel it is equal. "(Inf.11, Female Malawian Matron)

The Norwegian health workers are described here as having a much higher possibility to enjoy their leisure time and having more ways of recharging their batteries than their Malawian counterparts. Any discussion around how division of workload is being understood between the Norwegian and the Malawian health workers has to be seen in the light of differences in motivation and incentives as well.

Here it has been described how, on the one hand, the low incentives and heavy workload are influencing the Malawian health workers in a negative way. The motivation they have to do a good job is hindered by the daily struggle for money to survive. The Norwegian health workers, on the other hand, have a generally high motivation to work at Bwaila and also other non- monetary incentives that make it attractive for them to work at the hospital.

Improvements

One of the objectives of the thesis is to look into what could be done differently in this intervention; what are the potential of improvements for this intervention seen from the health workers perspective? The focus in this section will be on local suggestions for improvements.

Length of stay

One of the things that came up was that many of the health workers, both Norwegian and Malawian said that the length of the stay, 6 months, was too short. With the time it takes to adapt to the working conditions, the culture and the language challenges, you are barely adjusted when the time is up and you go back to Norway. Due to the fact that it takes time to be able to make yourself useful in a totally different setting, it was thought that the length of the stay should be extended:

> "For 6 months I find it to be rather short if it was a long time it would be better because the Norwegians they are coming here to a

> completely different environment the working environment is very different and also the adaptation to the country , and to me I feel that 6 Months usually, by the end of 6 months you are just beginning to adapt yourself to the situation and then it is time for you to go, so 6 months is like too short , that's why I would like to see it change" (Inf.17, Female Malawian Matron)

Another Malawian midwife also suggested that 1 year should be the length of the stay, and it would be good to have an overlapping period of 2 months. In that way the newcomer could get some introduction from the Norwegian health workers that had stayed there for a long time, and that would make the transition smoother. This was interpreted to be advantageous to the Norwegian health workers as it would prepare them for what they would meet at Bwaila. This was expressed both by the Malawian and the Norwegian health workers.

More knowledge about the intervention

Both the Norwegian and the Malawian health workers said that it would have been useful if they knew more about the intervention before they started working with it. From the Malawian side it was suggested that knowledge about the intervention and the objectives of the intervention would have made it easier to cooperate from the beginning:

> "The program you know most of us we don't know the objectives yeah, why are they sending them here? What are they supposed to do? So maybe if we just need a clarification yeah we meet or I don't know if we meet or they send us some paper for clarification, just to make us know that we are sending our midwives and our clinicians they are supposed to do one two three and you know she knows 1 2 3 her scope of practice is like this" (Inf.10, Female Malawian Midwife)

This midwife says she missed knowing what they were supposed to do and what their scope of practice was. Bwaila is a big hospital and a teaching hospital for many students. It is also a place where midwives do their orientation. Quite a few international staff is working there, some for short term and some for long term contracts. From a Malawian point of view it seems very understandable that it might be difficult to distinguish all the different health workers from each other. Some of

them didn't know what kind of programme this was, and in that way didn't really know how to approach the Norwegians.

Also from the Norwegians it was expressed that it would have been useful to have knowledge about what they were going to do, and what it was like working in this kind of setting before they actually arrived in Malawi. Coming from a Norwegian hospital the contrast is enormous to start working at Bwaila, and there were some suggestions that could make it easier according to them. Being better informed about what to expect was one thing, it could be both oral and written information. Another thing was some kind of follow-up during their stay. Being in a totally new setting with all the challenges that it includes, some sort of more personal follow up from the Norwegian coordination team would have been appreciated. Doing a preparation course before leaving was also mentioned:

> "However you try to prepare yourself, when you get thrown into this, you will get hurt when you hit the ground, but being able to reflect beforehand, for example with a preparation course would be beneficial, I think". (Inf.19, Female Norwegian Midwife)

This midwife is missing a preparation course before going to work abroad. What she misses exists in the Fredskorpset exchange program as an integrated part of the program.

Incentives for the Malawian health workers

Another suggestion made by the Malawian health workers as a way of improving the intervention was to expand the exchange programme. This gap-filling intervention is initiated by 3 Norwegian hospitals, but there are also a Fredskorpset exchange programme between Bwaila hospital and Haukeland Universitetssykehus running in parallel. This is an exchange program where one midwife from Bwaila hospital goes to Haukeland hospital and vice versa. The exchange lasts for about a year. The Malawians knew that the two different programmes existed, but suggested to start an exchange program for doctors and nurses as well. They actually wanted to change the existing programme into more of an exchange programme where both doctors and nurses would go to Norway in the same way as the Norwegian doctors and midwives came to Malawi. Being able to see a different culture, and learn from a

Norwegian hospital about how they work where factors that they said motivated them:

> "I think if we want to build this relationship there should be interaction between the hospitals yes, it is only can I say it's unfortunate I propose that the doctors from here or the nurses should also go to Norway now only midwives are going to Norway." (Inf.12, Male Malawian Clinical Officer)

Their wish to go to Norway to work in a Norwegian setting can be seen as a way of being curious about the world, both culturally and professionally. Like the Norwegians are motivated to go to Malawi because it allows them to see a new continent and experience new professional challenges, so to, the Malawians want to experience the same the other way around. The Fredskorpset exchange programme has a high degree of equity thinking in their programme. According to their web site they want to "contribute to the creation of contact and cooperation between individuals, organizations and institutions in Norway and in the developing countries, based on solidarity, equality and reciprocity" (46). There are incentives in the program for both parts, both in terms of professional development and monetary incentives. The wish from the Malawian health personnel to go to Norway as well has to been seen in light of motivating incentives. The fact that there are incentives for both parties, compared to the existing arrangement, where the Norwegians are the only ones with the high incentives, might be why this suggestion came up from the Malawian side.

One of the main intentions with this human resource intervention at Bwaila was to have a gap-filling function due to the human resource crisis at Bwaila. One matron pointed out that if this exchange programme was going to take over the whole program you will loose the gap-filling function of the programme:

> "..If one goes out and one comes in you are not achieving anything because you are just taking that person out, there will still be that gap…" (Inf.17, Female Malawian Matron)

From the leadership at the hospital it was being said that the gap-filling function was central, and they were naturally more reluctant to have an exchange programme that would not help increase the number of staff in the ward. None of the health

personnel in leading positions at Bwaila suggested an expansion of the exchange programme. However, for the health workers on the ground it was looked upon as a positive opportunity they very much would like to see started. Even though the programme in that case would no longer have any gap-filling function they still saw it as being valuable for the staff and patients:

> "It will change also their working attitude, because they say we Malawians we don't have a good attitude with the patients, we don't come in time, so with that environment you would see even they come in time, everyone does what they are supposed to do in time, your are rushing to do this…I think when they come back they will be changed people…" (Inf.13, Female Malawian Medical Doctor)

To be in a modern, efficient hospital environment is valued very highly by this doctor. She says that she thinks it can motivate the staff who goes to on the exchange to change their attitude in a positive direction. Monetary incentives were also mentioned by several of the Malawians as a thing that would improve the intervention. If there could be some incentives for the staff at the maternity ward that would be a motivating factor for them. A midwife describes that she receives approximately 35000 Kwacha a month (ca.1750 NOK), and that was far from enough to sustain herself and her family. Monetary incentives were described as providing motivation which would enable them to work better and for longer in the ward.

Some of the Malawian health workers said that both internal courses, and some sort of more organized training from the Norwegian side would be appreciated. One midwife also suggested that if the Norwegian hospitals could support some research projects within the ward it would be very positive. For a hospital being so understaffed and missing so many resources we take for granted in Norway, the enthusiasm and willingness to expand their knowledge as seen by some of the Malawian health personnel was impressive. Some of them showed a toughness and positive attitude towards their work that is formidable.

Specialized health personnel

Regarding the human resources in this intervention, some of the Malawians had a suggestion that the Norwegian hospitals should only send specialist, gynecologists

to work at Bwaila, not generalists. The person who is expected to train and supervise experienced clinical officers and doctors in Malawi needs to have a very high skill level. In order to be useful for the department they need specialists to come over. This clinical officer says:

> "They should only send the specialists" (Inf.16, Male Malawian Clinical Officer)

The workload and the challenges are of such a dimension that a highly specialized medical background is required. This midwife describes the challenges for the Norwegian doctors/gynecologists that come to Malawi, and why they have a more difficult time than the Norwegian midwives in her opinion:

> " I do want to say that the gynecologist has a far harder job than the midwife, much harder, I think the midwife has a hard job, but she has her days off and goes home, she is not on call, and she doesn't actually have to take any more responsibility for leadership mentorship, she has somebody she can call, I don't underestimate her role at all but I think the gynecologist who come her has a huge job, the gynecologist who comes her is put in to a registrar position, according to people here is very high position in Malawi, I know it's a high position , but it is much higher position in Malawi than it is in Norway… They can be called out any time, called on to do surgery or situation that they have never met in Norway and they are supposed to know..." (Inf.18, Female Expatriate Midwife)

This description of the challenging working conditions for the gynecologist is an argument for why experienced gynecologists should be sent to work at Bwaila.

Working nightshifts

The Norwegian midwives in the ward are mainly doing dayshifts; according to them that is what they are asked to do. It was suggested from some of the Malawian midwives that they should also start doing nightshifts, at least once a week. The reason for wanting to have the Norwegian midwives present at night was both to make them see what it is like to work night at Bwaila, according to the midwives it is really hard and tiresome. The number of staff on duty during the night is lower than during the day, according to them, so an increased number of midwives would be

welcomed. This could be seen as a step towards more equality between the Malawian and Norwegian midwives in terms of workload. The Norwegian midwives work 4 days a week, as they are trying to follow Norwegian working regulations that are 37, 5 hours a week. When only doing dayshifts the working conditions are quite different for the Norwegian and the Malawian midwives. On the other hand there are reasons for having the Norwegian midwives in the ward during the day. One matron explained that the Norwegian presence during the daytime was important as it made it possible for the midwife in charge to do other important things, like ordering drugs, writing reports and so on.

Respecting each others knowledge

The final point under this chapter on potential of improvements is about showing respect for each others knowledge. The Malawians says that there have been some situations where some of the Norwegians have shown a poor attitude towards the Malawian staff. This was understood to be about how people actually talk to one another but also about how the different knowledge is looked upon by the different people in this human resource intervention:

> "They should be told that there are people here on the ground who knows how to do the work here in Malawi, before the Norwegians came the Malawians were doing the work, yes! Even in Norway if I was told there was somebody coming from the US when they are landing they haven't invented anything, the only thing is that they are coming from far away, and if they have to come here to work there are nurses and there are clinicians, and if we are doing something different we have to discus about that, but people shouldn't be coming here thinking we are blank, that's were the problem starts. "(Inf.17, Female Malawian Matron)

The Matron is suggesting an improvement in the amount of knowledge the Norwegians have concerning the skills of the Malawian health workers before they start working at the hospital Even though the Norwegian health workers skills and education is needed at Bwaila, it doesn't mean that those who work there permanently don't have a lot of skills themselves. What this Malawian matron says is that if the Norwegians had a better understanding of the resources at Bwaila before

they left Norway, the teamwork might be easier from the beginning. One clinical officer also comments on the attitude of some of the Norwegian health workers:

> "It's a personality thing, yes, some they are when they are talking they are harsh." (Inf.12, Male Malawian Clinical Officer)

He says that some of them speak harshly to the Malawians. Emergency situations are known to change the way people talk to each other, but politeness should still be considered important, also towards colleagues, and this is something he would like to see improved.

Suggestions for changes:

These points summarize what could be improved in the intervention according to the health personnel involved and also provide some answers to the 4th objective of this study:

- Extend the length of the working period for the Norwegian personnel at Bwaila to at least 1 year
- Have an overlapping period of 2 months for the Norwegian personnel
- Have a preparation course for the Norwegians before they go abroad and a contact person in Malawi for personal follow up
- Give more information to both Norwegian and Malawian health personnel about the objectives of the intervention
- Let Norwegian midwives do night shifts as well
- Send only specialized gynecologists to Malawi
- Send Malawian clinicians to work in Norway as well; extend the Fredskorpset exchange program to include clinicians and nurses
- Give incentives to the Malawians as well
- Show respect for each others knowledge
- Show politeness towards colleagues as well as patients

The views of the Malawian and the Norwegian health personnel have been discussed in this chapter, including what in their opinion could make this intervention better. Several components that are already included in the Fredskorpset exchange program are wanted by some of the participants of this intervention.

SUMMARY OF FINDINGS

This study finds that even though there are big challenges facing the intervention, many health workers also find many positive aspects in working at Bwaila hospital. The possibility of having an important impact on the lives of the patients, as well as a huge learning potential were accentuated by the participants. The big challenges participants faced working at Bwaila was lack of staff, lack of equipment, and negative feedback from patients and media. In regards to skill transfer this study finds that the transfer of knowledge is going both ways. Some of the Malawians say that they learnt about standing up for their patients, as well as different midwifery practices from the Norwegian health workers.

The Norwegians mentioned learning new obstetric and gynecological procedures as well as broadening their understating of the human rights violations these poor women suffer. Different languages spoken in the labor ward seem to make communication more difficult between the different nationalities. The Malawians and the Norwegians have very different incentives for doing their job, which also seems to affect their job performance. Many of the Malawians have poor motivation because of low incentives and hard working conditions. The Norwegians on the other hand are generally highly motivated, where both experiencing a new country as well as learning many new skills is non monetary incentives for them. Regarding improvements, suggestions that came up from the Malawian side was to extend the length of stay for the individual health worker, start exchanging doctors to Norway as well, and to show respect for each others knowledge and experience. From the Norwegian side suggestions like doing a preparatory course before leaving, personal support from the project when being in Malawi, as well as extending the working period was presented.

Evaluation of the intervention

The aim of this study was to do a process evaluation where the perspectives and reflections of the health workers involved were the main focus. This has been shown in the previous chapter where the main findings were described. As this study has only consisted of qualitative data on the human resource intervention, the data collection is far from sufficient to make a complete evaluation. Still, when trying to look at the bigger picture, using evaluation criteria can be an interesting way of seeing this health intervention in a bigger context. Using the five OECD criteria is one commonly used way to evaluate a development aid project(39). I will now look at the findings presented in the last chapter in relation to the objectives of the health intervention and see how they correspond with the OECD evaluation criteria. I will also explain why evaluating the intervention strictly according to the criteria is somehow problematic with the data available.

Relevance of the project

One of the criteria for an evaluation is the relevance of the project. The indicator 'relevance' means that the intervention should be relevant for the people on the receiving end. That there is a need for this kind of intervention is a minimum for being able to call an intervention relevant. However, that there is a need is not enough to make it relevant for the target group. An intervention should also be consistent with the priorities and policies of the target groups. This human resource intervention supported through the Norwegian institutional collaboration is in response to needs that have been identified by the hospital authorities at Bwaila. Therefore, it can clearly be said to be relevant in terms of the needs of the hospital. The huge vacancy rates both among nurse/midwives and doctors in Malawi are also present at Bwaila hospital. Staff is lacking in huge numbers, and the staff who is working there is overloaded with their duties. Most health workers at Bwaila say that they welcome this intervention, and are glad for the extra hands that they get to help with the workload. Being more specific regarding relevance one has to look into how the intervention is technically adequate to the needs of the stakeholders. Technical adequacy increases the relevance of a project (39). One of the findings in this study

is that the Malawian staff wants experienced gynecologists to be sent to Bwaila hospital to work for them, not doctors without specialization. The objective of the whole intervention is to assist in improving the quality of care at Bwaila hospital by sending specialized health personnel to work together with the Malawian health personnel. Sending only gynecologists and not doctors would be a way to increase the technical adequacy of the intervention, according to health personnel on the receiving end. In that way the teaching aspects could be even more integrated into the daily training. A reason for why doctors and not gynecologists have been sent to Bwaila is that it has been difficult to get Norwegian gynecologists to volunteer for the job. To be able to continue the programmed doctors under specialization have been recruited from the Norwegian hospitals as well.

On this point I would summarize that the relevance in terms of technical adequacy is there, but has the potential of being increased by sending specialized staff like gynecologist to work at the hospital. Letting the Norwegian midwives do nightshifts as well would increase the technical relevance according to some of the Malawian midwives.

When looking at the objectives of the intervention, namely to contribute to improving the quality of care and to help to reduce the maternal mortality in Malawi, the means that have been available have to be taken into consideration. Sending one doctor/gynecologist and one midwife to a maternity ward with 12000 deliveries a year cannot be expected to have a huge impact, for the means in terms of amount of human resources are very small compared to the needs at the hospital. So in terms of being able to solve the problem at hand, the relevance of the intervention is not sufficient, for the pure reason that the input in terms of human resources is far too small.

The relevance according to the government policies and priorities in Malawi is also an aspect of what is considered to be part of an intervention's relevance. The Ministry of Health in Malawi made a 6-year emergency plan in 2005 as a way to meet the human resource challenges they are facing. In the plan, strengthening human resources to provide quality skilled care was one of the strategies(47). Some of the interventions they propose are as follows: 1) Ensure adequate staffing at the health facility to provide the essential health care package and 2) Increase and improve the training of staff.

To strengthen the human resources it is written that;

> "Ensure Emergency Obstetric Care is the highest priority in the Emergency Human resource Programme for re-engagement of staff, re-deployment of staff and placement of volunteer specialist doctors and nurse tutors"(47).

Recruiting volunteer doctors and nurses from overseas can be interpreted as one of many activities the Ministry of Health in Malawi wants to encourage to strengthen the human resource situation within Malawian health care. It was described that the possibility of importing nurses from overseas to meet the critical shortage of staff in Malawi had been declined because this would lead to collective action organized by the National Organization of Nurses and Midwives in Malawi. If the Malawian government decided to pay to get nurses from overseas to come and work in Malawi, the argument was that they should rather improve the working conditions and salaries of the already existing nurses in Malawi instead of starting to invest in personnel from abroad. The intervention at Bwaila hospital is a hospital-to-hospital cooperation, and is not part of the government's strategy to strengthen the human resource situation. Since the doctors and midwives coming from Norway are paid by the Norwegian, and not the Malawian government, this is not an issue for the Nurses and Midwives Organization of Malawi.

This human resource intervention was a bottom-up initiative that started out of frustration that the current national strategy and policy did not help the individual hospital to increase their staff and quality of care. Therefore, it was an initiative that was started and implemented outside the Ministry of Health in Malawi, but can still be said to be in accordance with the government's overall policy plan.

In terms of overall relevance, it can be summarized that this human resource intervention is highly relevant to the needs of the hospital, but far from sufficient to solve the problem.

Questions regarding sustainability

In an evaluation of development aid, sustainability is a commonly used criterion. When one wants to look at the sustainability of a project it is common to look into what degree the benefits from the intervention will be maintained after the

withdrawal of the support. It is hardly ever possible to say this with exact certainty so it will be a question of the likelihood that the positive impact will be a lasting one. NGOs doing human resource interventions often use education of local staff as a way of meeting the demand of sustainability. In contrast to, for example, setting up a physical building like a school or hospital, human resource interventions are more difficult to prove as sustainable, if their presence is short term. Education of local staff is a priority when working for an organization like Doctors without Borders, and a way to justify that expatriates are being sent to low-resource countries with the high costs that come with it. Being well aware that the human resource itself will not be more sustainable than the period of time they are present in the area, other ways of measuring sustainability are necessary. The aspect of teaching is one way of indicating that what is taught the local staff will be of benefit for the population after the withdrawal of the intervention itself.

Aside from teaching there were other aspects to this intervention, including technical aspects like using CTG machines for the health workers. However, teaching students was central. Other aspects being taught were patient management, being proactive on behalf of the patient and having a more caring approach towards the patient. The Norwegian health personnel focused on these topics in their daily work. They were working as role models for quality care in the ward. A weakness with this model is that it is very dependent on the skills and approach of the individual Norwegian health worker. It has been argued in the evaluation done by HERA (42) that a more strategic, structured approach towards skill transfer is important to make the program sustainable. This can be considered, however teaching by example is also thought to be a very good way of teaching, as suggested by this study. This method of role model teaching is also quite common within health professions all over the world. When working in a poor hospital in a poor country, the needs described by the local health workers should be listened to. The ethics around planning to introduce more teaching sessions outside the ward should also be discussed, as the staff's presence in the ward is crucial to be able to save the lives of mothers and children.

To what degree the knowledge transferred will be sustained after the end of the project is difficult to predict, but that will be the same challenge to measure for both classroom teaching and bedside teaching.

To summarize, if participating in skill transfer with the local staff is accepted as a way to measure sustainability, then this intervention has the potential to be sustainable.

In my opinion the word sustainability is useful when looking at, for example, a building built by donor money; will it be in use? Will it be sustained after the end of the project? If not, then the project should be considered unsustainable if the criteria of sustainability were not met, and lessons could be learnt from the project. With human resource interventions it is different. The intention of the intervention is to help patients there and then, not to focus on a potential positive impact somewhere in the future. Any mother or child that gets through the delivery alive and healthy are sustained for the future, and what more can one ask for in terms of delivery care?

Being a short term programme with the aim to assist in a critical human shortage situation, it should be reflected over what sustainability should mean in such a setting(48).

Reflections on the impact of the intervention

As evaluators have the advantage of hindsight, things can come up in an evaluation that could not easily be seen before the intervention started. When looking at impact it is common to look into positive and negative factors that are caused by the intervention itself. Impact studies are important within development aid, to avoid detrimental aid. The impact of this intervention is that the Malawian health workers get assistance to do their jobs in the maternity ward. The positive impact of this intervention, according to the findings of this study, is the knowledge exchange between the Malawian and the Norwegian health personnel. Another positive impact is the medical care the delivering women get from being treated by the Norwegian health personnel. If we look at unexpected impact one thing that has come up is that some of the Malawian health personnel have a tendency not to show up to work on time, and they do other things like leaving the ward, showing up late and so on. The reason behind this behavior is not completely known. In some cases it may be because they are doing medical related courses and the presence of the Norwegian health workers make it possible for them to participate. But from the findings it seems also seems reasonable to say that not being present in the ward is caused by the Malawian health workers need to sustain themselves in other ways, or that they

have private family matters to take care of. The Norwegian presence in the maternity is seen as a way for them to get help to relieve their hard working conditions. This is a frustration for the Norwegian health workers, who want to work with the Malawians on equal terms. From the Malawian side the Norwegian presence in the ward can be seen to have a positive impact. Here a question is raised regarding equality between the Malawians and the Norwegians, as well as what are considered acceptable working standards. Their life situations are very different, and so is the motivation to do the job.

Hence, the positive impact is the skill transfer between the Malawians and Norwegians, as well as the care received by patients being treated by the Norwegian personnel. A negative impact from a Norwegian perspective is when the Malawians do not show up to work when they are present in the ward.

Perspectives on efficiency

Measuring the efficiency of a development aid intervention focuses on assessing whether resources were used most efficiently to produce the wanted output. There are two different types of efficiency. One is called *technical efficiency,* meaning that an intervention is technically efficient when its productive capacity is fully utilized(39). In this case, where the resources are health personnel, measuring the technical efficiency would in this case include looking at the Norwegian health personnel's working hours at Bwaila hospital, the specialized knowledge of the personnel sent to Malawi and also factors enabling or disabling them to do their work as efficiently as possible in the context they are working. Seen in relation to what has been said in the interviews by the Malawian health personnel they have several suggestions that would increase the technical efficiency of the intervention. Suggestions like making the Norwegian midwives do nightshifts as well as dayshifts would be an example of what the Malawians would consider an increased technical efficiency. Another suggestion that came up from the Malawian side was that the Norwegian health workers could do some more class room teaching, not only bedside teaching. However, on that point there were diverging views as a matron said that bed-side teaching was what they really needed, not class room lectures. Both these examples are suggestions of what the Malawians considered to be an increased technical efficiency.

The *allocative efficiency* is to evaluate a program in terms of if alternative use of the same resources would be a better way to reach the objectives of the intervention. For example, one could question if the monetary resources spent to have two Norwegian personnel in Malawi instead could be used to pay for education of many more Malawian midwives and other health personnel in Malawi. Would this be a more efficient allocation of the same resources? Discussing this aspect has to take into consideration that it takes years to educate a Malawian health worker, some of them might migrate, and maybe only a few of them will end up working in hospitals in Malawi. If the skills and work ethic that the Norwegian health personnel possess are considered of importance to reach the objective of the intervention, it would not be an adequate alternative use of money. For the gap-filling function, it might be relevant. This project has also supported the education of nurses in Malawi, so can, in that sense; say to have approached the human resource crisis several ways.
These aspects of an intervention are part of a bigger discussion. There is no question that the needs in Malawi are enormous, but the wisest way of spending the resources are not always that obvious.

Aspects of effectiveness

Effectiveness looks into which degree a development intervention has achieved its objectives, taking their relative importance into account(39). It is not obvious in a process evaluation like this to state to what extent the intervention is functioning according to its objectives. This study can give some reflections and suggestions, but no absolute answers. To state the effectiveness of the intervention is not possible with the data at hand, but reflection around the topic can enlighten some aspects of why it is difficult to measure its effectiveness. If the overall objectives of the intervention had been more specific, it would have been easier to evaluate the effectiveness of the intervention. One of these objectives, “contribute to reduce the maternal mortality” is a very wide, big goal that specifies a direction of the aid, but is not very precise. To be able to evaluate to what degree an intervention has been effective, small and specific goals can be helpful. The objectives of this health intervention are quite like the overall goal of the Norwegian Government for much of their health related development aid(49). Even the immediate objectives 2008-2010 which are to “increase the safety of delivery at Bwaila by instituting basic delivery

care and support training of health workers”(12) could also have been more precise so that the positive achievements of this intervention could have been given the credit it deserves. Having had more specific goals would, in my opinion, give more justice to the intervention itself, as it would make it possible to measure the projects achievements at Bwaila hospital.

In comparison Bistandsnemda can be mentioned, this project receives 130 Million NOK from Norwegian Agency For Development Cooperation (NORAD) every year(50). They are sending Norwegian missionaries to many parts of the world to do various work, including teaching. But no one expects a measurable increased number of Christian people in the area they are operating in from these single missionary individuals. The effectiveness of their efforts has to be understood in other, measurable terms, and the same will be true for this intervention.

Skill transfer and gap-filling at Bwaila hospital is a step on the way to improving quality of care, which again is a step on the way to contributing to reduce some of the factors that make maternal mortality so high. Seen from the Malawian health personnel point of view this exchange of knowledge has been valuable and the Malawians say that this support is important in tough times. From any more objective view it is hard to measure the effectiveness. The resources needed to see a reduction in maternal mortality in the Lilongwe area is not reflected in the financial and human resource investment that this human resource intervention has available.

Another aspect that makes it difficult to measure the effectiveness of this specific Norwegian intervention is that there are many ongoing human resource interventions at the same time at Bwaila hospital. Health workers from many countries are working at this hospital in parallel, short term and long term projects, from Spain, Germany and other countries, and any improvement of the quality of care at the hospital must be seen in the light of all these peoples contributions as well as improvements in work from the Malawian staff themselves.

In this chapter I have looked into the challenges of describing the effectiveness of this intervention. This is caused both by the lack of sufficient data in this study, as well as a lack of specific, measurable objectives in the programme plan itself.

Millennium Development Goal Number 5

The various western governments' work on the Millennium Development goal 5 has been criticized from many perspectives. If one really was serious about reducing maternal mortality in, for example, Malawi, completely different amounts of money and efforts would have had to have been invested. They can invest as little as they want, and still take the credit for saying they are working to solve the problem. The donor countries want to contribute to reducing maternal mortality in the developing countries, but what they are willing to spend on it financially and also in terms of binding commitments is unclear. There is also no clear understanding so far as to where the legal duty to fulfill, for instance, the right to health for people in other countries lies, and how donor countries should be held responsible for detrimental aid, but this may now be tested in court(51). This new approach, going from soft to hard law is being discussed among Human rights activists. Soft law means commitments made by negotiating parties that are not legally binding (like the MDG's), while hard law means binding laws. In international law, hard law includes treaties or international agreements. These instruments result in legally enforceable commitments for countries and other international subjects(52). This hard law approach would result in legally binding obligations behind the work on the Millennium Goal 5 for countries like Norway. This could have the consequence that when a commitment is being made about a reduction in maternal mortality in a country, the countries who sign up would have to pay whatever it costs to get there. If they did not reach their goals it could have the consequence that they would be taken to court. A reflection around these different types of commitments is highly relevant for an evaluation of a human resource intervention like this. A hard law approach would namely make it crucial to find out what kind of health interventions to combat maternal mortality actually has the wanted effect.

Some say the focus on the MDG's has been positive, as the worlds focus on poverty in poor countries has been upheld through different political and economic times from the1990s. Others criticize the MDG's for having the wrong agenda; the agenda for helping poor countries should rather be "wealth creation", as that is what has been one of the main factors for the health improvements and reduction of maternal mortality seen in the last 100 years in countries like Norway. The present approach

towards poor countries focuses on palliative economics to ease the pain of poverty rather than permanently eradicating it through economic development(53). Again others are criticizing the MDG's because they do not focus on how to reach them, like democracy, policy or gender equality, in the countries they are operating. Some even say that the MDG's are mainly there to humanize the global North, to make the people in the North feel human. In that way we do this work maybe more for ourselves than for the ones we are trying to help(54).In a western life style, where individualism and consumerism are integrated ways of living, the MDG's can function as a reminder that our ability to care for strangers, our kindness, is an essential part of being a complete human being(55). There is of course nothing wrong with kindness and caring for others, rather the contrary and combating maternal mortality worldwide is one way of engaging in it. But results should be expected before it has a soothing effect on the caregiver. To give of ones wealth to the poor and needy might be a virtue, but from governments being professional actors in an international political setting more than a philanthropic spirit should be expected(54).

Reflections around the MDG's give an idea of how different this health approach is viewed by different stakeholders and how controversial they are seen to be by some. This is an interesting aspect as the Norwegian government has embraced the MDG's and uses it as a kind of starting point for how to direct much of their health related development aid.

The possibility of using hard law to force the donor countries to make sure their commitments will materialize has been discussed. It is also described that different stakeholders are having diverging views on the correctness of focusing on the MDG's when trying to eradicate poverty and improve the health status of poor nations.

Recommendations for the future

This study has had the aim to add knowledge about how a health intervention is perceived by the health personnel involved. With health personnel travelling abroad to work in a higher number than ever before to many places in the world, knowledge about how cooperation between the national and expatriate personnel is functioning is an issue of concern. In general, knowledge about health workers motivation,

retention factors and cooperative skills within health systems is important to be able to use the health work force of today and in the future to a full extent.

More knowledge is needed about how different incentives influence the working environment and the motivation of the different health workers.

I think it is also appropriate to recommend looking deeper into whether the different incentives and working conditions given to health workers of different nationalities is a part of a discriminative working context, and if so, how this should be handled. More knowledge is also needed to know how the transfer of skills can be used in the best way for the hospital receiving the assistance. The hospital in need of assistance should decide how this skill transfer should happen. There must not be a standard answer that classroom sessions are the only answer to the question regarding skill transfer and sustainability.

For this specific human resource health intervention a recommendation for the future is that the programme should make more specific objectives that can be monitored by the project itself on a monthly or half yearly basis, as the programme in that way can measure their achievements more objectively. This again may ease future funding.

Conclusion

In this study I have investigated how a human resource health intervention at Bwaila hospital is perceived by the health personnel involved. Reflections around how it is to work at Bwaila hospital and how human resources from abroad are perceived by the staff involved have been discussed. Bringing health personnel from overseas is one of many steps towards trying to solve a human resource crisis in health care in many countries. There are incentives for Norwegian health care workers to go to poorer countries to work. The Malawian health workers see this human resource intervention as support in tough times, but want more incentives for doing their job. The possibility of getting to know a new country, a new culture and learn new skills seems to be an incentive for many health care workers, along with monetary incentives. Knowledge is exchanged between the Malawians and the Norwegians, both parts learn new skills. Being a small human resource intervention it might have been positive for the intervention to have small, achievable goals that make it possible to measure their outcomes. Importing health care personnel from abroad

might continue in the foreseeable future, as one of many ways in trying to solve the human resource crisis in Malawi. How human resource health interventions will be organized as a part of the Norwegian development aid programme in the future is an ongoing discussion.

However, it is beyond doubt that this human resource intervention at Bwaila hospital in Lilongwe has been positive for both staff and patients and given many experiences and a lot of new knowledge to both Malawian and Norwegian health personnel.

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APPENDIX 1 – Norwegian ethical committee

UNIVERSITETET I OSLO
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Dato: 06.07.09
Deres ref.:
Vår ref.: 2009/216b

Dear Ms. Sundby,

Further to Janne Hunsbeth's email dated 1st of July 2009, we herewith send you a confirmation in English based our letter dated 26th June 2009.

Re: 2009/216b Evaluering av en helseintervensjon på Bwaila Sykehus, Malawi

The Regional Committee for Medical Research Ethics, South-Eastern Division, Norway, reviewed your project at their Committee Board Meeting on 17th June 2009.

Decision:
The Committee is of the opinion that the study is an evaluation of an existing offer of treatment and thus do not consider the study as medical- or health-based research. Moreover, the object of the study is not the patients themselves but the Health Personnel and their professional practice.

The project therefore falls outside the Committee's guidelines.

The Committee's decision was unanimous.

(Signed Tor Norseth, Committee Leader, and Julianne Krohn-Hansen, Committee Secretary)

With kind regards,

Julianne Krohn-Hansen
Committee Secretary

APPENDIX 2- Malawian ethical committee

Telephone: + 265 789 400
Facsimile: + 265 789 431
e-mail doccentre@malawi.net
All Communications should be addressed to:
The Secretary for Health and Population

In reply please quote No. MED/4/36c
MINISTRY OF HEALTH
P.O. BOX 30377
LILONGWE 3
MALAWI

20th November, 2009

Janne Gabrielle Hunsbeth
University of Oslo

Dear Madam,

RE: Protocol #666: Evaluation of a Health intervention at Bwaila Hospital, Lilongwe

Thank you for the above titled proposal that you submitted to the National Health Sciences Research Committee (NHSRC) for review. Please be advised that the NHSRC has **reviewed** and **approved** your application to conduct the above titled study.

- **APPROVAL NUMBER** :**NHSRC #666**
  The above details should be used on all correspondence, consent forms and documents as appropriate.
- **APPROVAL DATE** :**20th November 2009**
- **EXPIRATION DATE** :This approval expires on **19th November 2010**
  After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the NHSRC secretariat should be submitted one month before the expiration date for continuing review.
- **SERIOUS ADVERSE EVENT REPORTING** :All serious problems having to do with subject safety must be reported to the National Health Sciences Research Committee within 10 working days using standard forms obtainable from the NHSRC Secretariat.
- **MODIFICATIONS**: Prior NHSRC approval using standard forms obtainable from the NHSRC Secretariat is required before implementing any changes in the Protocol (including changes in the consent documents). You may not use any other consent documents besides those approved by the NHSRC.
- **TERMINATION OF STUDY**: On termination of a study, a report has to be submitted to the NHSRC using standard forms obtainable from the NHSRC Secretariat.
- **QUESTIONS**: Please contact the NHSRC on Telephone No. (01) 789314, 08588957 or by e-mail on doccentre@malawi.net
- **Other:**
  Please be reminded to send in copies of your final research results for our records as well as for the Health Research Database.

Kind regards from the NHSRC Secretariat.

.....
FOR CHAIRMAN, NATIONAL HEALTH SCIENCES RESEARCH COMMITTEE

APPENDIX 3 – Informed Consent form

INFORMED CONSENT FORM

Evaluation of a health intervention at Bwaila hospital.

My name is Janne Hunsbeth and I am for the time being at Bwaila hospital to conduct a study. I am a midwife in Norway and currently doing my Master Thesis in International Community Health at the Medical Faculty at the University of Oslo in Norway. The title of the master thesis is Evaluation of a health intervention at Bwaila hospital.

In 2007 Bwaila Hospital started collaborating with 3 Norwegian hospitals with the aim to help to improve the quality of health care in the maternity unit at Bwaila hospital.

They started sending down a midwife and a gynaecologist for 6 month on rotation to work together with the local midwives, Clinical Officers and doctors in Malawi.

This study intends to look at how this health intervention is perceived by the health personnel involved; Malawians and Norwegians, midwives, Clinical Officers, doctors and gynaecologists.

The study will take place in the period November 2009-January 2010.

About the interviews:

I plan to conduct one-on-one interviews with the staff about their working situation. The interviews will be conducted at old Bwaila Maternity ward in a quiet place without interruptions.

I will use a recorder to tape what is being said, so I don't have to sit and write during the interview. The data will be anonymous with a number: your name will not be found in any written paper. I am the only person who can link what you say to your name.

Still, something you say might be recognised by others when they read the thesis. That can happen if you tell a special story or something else that links the situation you describe to you personally. If you don't want this to happen, you can remove parts of the text from the transcript and it will be completely left out from the thesis. I will do my best to keep the data anonymous when writing the thesis.

I will ask you to sign a form if you are willing to participate in the study. You can decline to participate without any explanation. If you say yes now, you can withdraw later without any explanation.

It you say no, it will have no consequences for your work at Bwaila/Norwegian hospital or for the collaboration with the Norwegian hospitals.

If you have any questions regarding this study, please feel free to call me.

My telephone number is 0993624030

Regards Janne Hunsbeth
Midwife and M.phil student

If you have any questions regarding this study you can contact Dr. Charles Mwansambo on phone number 0888826946

INFORMED CONSENT FORM:

Yes, I will participate in the study:
“Evaluation of a health intervention at Bwaila hospital.”

.....
.....
(Date and signature)

APPENDIX 4 – Interview guide 1

Interview guide for the Malawian health workers

We will spend approximately 1 hour to talk about your views of Bwaila hospital in the context of having collaborators from Norway working there. All our discussion will be about how the presence of Norwegian health workers has contributed to changes since their coming.

So when we talk I want you to focus on how Norwegian health workers and Malawian health workers have been working together.

Questions that I have prepared are the following:

1 What has it been like to work at Bwaila hospital?

2 How long have you been working at Bwaila?

3 What has been good about working here?

4 What has been less optimal about working here?

5 What do you know about the Norwegian health workers intervention at Bwaila hospital?

6 What does it mean to you to have Norwegian health workers at Bwaila?

Do you think you and the Norwegian health workers work under similar conditions?

7 Have you seen any changes? Who is benefiting from this intervention?

Is it the patients? Is it the health workers?

Or in what way is this less beneficial to patients or health workers?

What do you think is making this less beneficial?

What could be done to make it more beneficial?

8 In this initiative how have Malawian and Norwegian health workers worked together? What do you see as the benefits if Malawian and Norwegians working together?

Can you give me an example of what it means to you to work together?

How often do you see this happening? Which cadres work well together?

9 What works well? What works less well?

10 If this was to be done over again, what would you like to see continue and what would you like to see change?

The interview is over and the tape recorder is switched off.

I want to thank you so much for the valuable contribution that you have given to this study.

APPENDIX 5 - Interview guide 2

Interview guide for the Norwegian health workers

We will spend approximately an hour to talk about your views working at Bwaila hospital collaborating with Malawian health workers.

All our discussion will be about you working at Bwaila hospital. So when we talk I want you to focus on how you and the Malawian health workers have been working together.

Questions that I have prepared are the following;

1 Before you came to Malawi have you worked in other low income countries?

2 How much about Malawian health care services did you know before you came here?

3 Where did you get to know about this initiative?

4 What was your motivation for going to Bwaila?

5 How long have you worked under this initiative?

6 What did you understand your role to be?

7 What has your experience been working at Bwaila?

Does it meet the objective of the initiative in your opinion?

Has your role changed while being here? What are the main challenges?

What are the main accomplishments?

What has contributed to these challenges or accomplishments?

8 How do you work together? What does it mean to you to work together?

What has made it easy or difficult for you to work together with the Malawians?

9 What works well? What works less well?

10 How do you integrate training of local staff in your work at Bwaila? Is it at all possible to do training and your other duties at the same day?

11 If this was to be done over again, what would you like to see continue and what would you like to see changed?

The interview is over and the audio recorder is being switched off. I want to thank you for the valuable contribution that you have given to this study.

APPENDIX 6 LIST OF ACRONYMS

AIDS Acquired Immune Deficiency Syndrome

CTG Cardio Toco Graph

GDP Gross Domestic Product

HERA Health Research for Action

HDI Human Development Index

HIV Human Immune Deficiency Virus

MDG Millennium Development Goal

NHSRC National Health Sciences Research Committee

NIPI Norway India Partnership Initiative

NORAD Norwegian Agency for Development Cooperation

OECD Organisation for Cooperation and Development

REK Regional komite for medisinsk og helsefaglig forskningsetikk

UK United Kingdom

UNICEF United Nations Children's Fund

WHO World Health Organisation